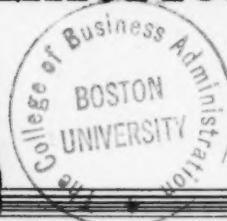


Manufacturers Record

Exponent America



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Baltimore, Md.
NOVEMBER 17, 1927

Thanksgiving

There is an old legend that every morning two angels leave heaven for earth—one the Angel of Petition and the other the Angel of Thanksgiving, each carrying a basket; and that at night the Angel of Petition returns with her basket heaped full and running over with petitions to the Almighty for every human desire, while the Angel of Thanksgiving returns with her basket almost empty.

Though a legend only, how true to human nature the story is! Blessings almost without end are poured out upon us, individually and as a nation; and yet how few, comparatively, in a spirit of profound gratitude bow in humility and render heartfelt thanks to God for His infinite mercies and blessings. On Thanksgiving Day the golf fields are crowded with eager players, and the forests and the fields resound with the reverberations of the hunters' horns or the crack of the shotgun; but our churches are but scantily filled with those called by the President to attend their places of worship in a spirit of thanksgiving.

Surely as a nation we have been the beneficiaries of God's great love, the recipients of His bounty, as no other nation in all the world.

Do we appreciate these facts, and as a nation and as individuals, in a true spirit of worship, render our thanksgiving to the Giver of every good and perfect gift, and joyfully sing,

"Praise God from whom all blessings flow."

THREE

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Manufacturers Record

EXPONENT OF AMERICA

Devoted to the Upbuilding of the Nation Through the Development
of the South and Southwest as the Nation's Greatest Material Asset

Trade-Name Registered in the U. S. Patent Office

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BALTIMORE, NOVEMBER 17, 1927.

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Foreign Competition American Farmers and Industrialists Have to Meet.

OVERPRODUCTION by American farmers is blamed for many of their ills. Our farming population has steadily decreased over a term of years and yet those remaining on the farms, due to the utilization of better methods and equipment, at times have found themselves in the possession of an abundance of agricultural products with no market offering a price sufficient to bring a profitable return upon their labor.

American agriculture, outside of a few tropical products, can supply the staple crop needs of this country. In spite of this, American farmers each year must face an influx of foreign grown crops and other agricultural commodities. Whenever most people, especially the American farmer, discuss the tariff they rarely consider the heavy importation of crude agricultural products which come into direct competition with the very products of their own labor. They do not realize that the aggregate value of agricultural imports for the fiscal year ending June 30, 1927, was over \$2,500,000,000, with which, in the main, American farmers have had to compete. Included in this are butter, 10,710,000 pounds; cheese, 89,782,000 pounds; live hogs, 40,465,000 pounds; live poultry, 2,019,000 pounds; milk, 6,106,000 gallons; fresh beef and veal, 22,098,000 pounds; fresh pork, 15,100,000 pounds; unmanufactured wool, 264,377,000 pounds; cleaned and uncleaned rice, 65,816,000 pounds; sugar, 4,320,000 tons; fresh tomatoes, 124,489,000 pounds, and potatoes, 380,816,000 pounds.

Excluding agricultural imports not now produced in this country, practically all of which are those of tropical origin, last year the farmers of the United States met the competition of foreign agricultural goods to the value of over \$1,400,000,000, on most of which a duty was imposed. Every dollar of this amount received by the farmers of foreign lands was lost to the farmers of this country and in some instances meant that American farmers instead of making a profit on a particular crop suffered a loss. Even where the rate of duty was sufficiently high to hold down imports to the minimum, such imported goods were a constant threat and acted as a club to beat down farm prices in this country below a fair return based upon America's higher standard of living.

The accompanying table illustrates the extent and variety of some of the crude farm products of other countries imported into the United States for the calendar year 1926. It should be remembered that taken as a whole our 1926 harvest was a good one.

The commodities listed in this table are farm products brought into this country from foreign lands and are exactly the same as similar products of the American farmer, and yet of most of the articles shown, this country has been supplying more than the local market demand. It may be noted

that in this list of products there is not included the additional millions of dollars of imported goods in the semi-manufactured or manufactured state and which in the end come into direct competition with the products of the American farmer.

Southern sugar planters, Southern peanut growers and

IMPORTS OF RAW PRODUCTS OF AGRICULTURE. (Calendar year 1926.)

| Commodity | Quantity | Value |
|----------------------------|---------------|-------------|
| Cattle, number | 219,584 | \$6,133,679 |
| Sheep, number | 42,146 | 290,363 |
| Hogs, pounds | 17,930,865 | 2,181,088 |
| Poultry, live, pounds | 1,907,707 | 472,196 |
| Beef, fresh, pounds | 16,213,430 | 1,696,940 |
| Veal, fresh, pounds | 3,892,722 | 576,268 |
| Pork, fresh, pounds | 9,156,493 | 2,033,852 |
| Mutton, fresh, pounds | 946,120 | 81,613 |
| Lamb, fresh, pounds | 2,418,923 | 420,628 |
| Other meats, pounds | 1,768,978 | 276,832 |
| Poultry, dead, pounds | 6,027,373 | 2,029,783 |
| Cream, gallons | 5,374,126 | 8,050,899 |
| Milk, gallons | 7,411,606 | 1,252,244 |
| Butter, pounds | 8,029,067 | 2,798,736 |
| Hides and skins, pounds | 368,578,111 | 96,810,855 |
| Buckwheat, pounds | 4,272,555 | 74,632 |
| Corn, bushels | 1,055,382 | 908,027 |
| Oats, bushels | 156,678 | 55,732 |
| Wheat, bushels | 14,142,761 | 19,552,784 |
| Hay, tons | 354,235 | 3,374,586 |
| Beans, dried, pounds | 65,538,445 | 2,464,470 |
| Rice, uncleaned, pounds | 22,651,304 | 942,950 |
| Rice, cleaned, pounds | 95,168,569 | 4,314,674 |
| Cane sugar, pounds | 9,420,077,000 | 232,530,000 |
| White potatoes, pounds | 343,675,093 | 8,328,329 |
| Molasses, gallons | 269,647,000 | 10,467,000 |
| Honey, pounds | 290,686 | 40,678 |
| Turnips, pounds | 96,584,310 | 596,059 |
| Tomatoes, raw, pounds | 80,851,601 | 2,659,391 |
| Onions, pounds | 103,129,624 | 1,937,364 |
| Other fresh vegetables | | 3,303,196 |
| Grapefruit, pounds | 17,830,140 | 535,174 |
| Lemons, pounds | 73,924,369 | 1,701,048 |
| Oranges, pounds | 976,421 | 50,386 |
| Pineapples | | 2,099,845 |
| Apples, bushels | 54,817 | 100,180 |
| Berries, pounds | 5,794,291 | 484,990 |
| Cherries, pounds | 3,245,012 | 327,952 |
| Raisins, pounds | 5,114,732 | 495,053 |
| Grapes | | 325,777 |
| Currants, pounds | 13,315,596 | 729,185 |
| Figs, pounds | 43,525,335 | 3,012,865 |
| Chestnuts, pounds | 25,897,798 | 1,264,998 |
| Walnuts, shelled, pounds | 23,107,626 | 5,752,134 |
| Walnuts, unshelled, pounds | 25,117,614 | 3,172,232 |
| Peanuts, shelled, pounds | 42,589,602 | 1,184,154 |
| Peanuts, unshelled, pounds | 3,989,935 | 190,054 |
| Pecans, pounds | 1,046,412 | 116,350 |

other farmers who have felt the effect of cheaply produced foreign agricultural imports have been making a long, hard fight for a protective tariff sufficient to save those industries. The winter vegetable and fruit growers of this country have begun to feel the effect of imported vegetables and fruits from Cuba, Mexico and South American countries. Truck and fruit growers are finding themselves practically in the same position as American industries which have to meet the cheap-labor produced goods of foreign countries.

Recently over 90,000 signatures were appended to a Florida petition to Congress for an increase in the tariff on tomatoes and other vegetables. Texas farmers are also crying out for help against the agricultural products being crowded into this country from foreign lands. In Florida's endeavor to save its annual \$18,000,000 tomato crop, a protective tariff of at least three cents a pound is urged. In its early vegetable crops Florida is facing the same crisis which in the last 15 years caused an annual loss of \$5,000,000 to its pineapple industry. It is urged that protection be extended also to peppers, beans and other vegetables grown during the winter season. Not only are Florida farmers involved, but those of the whole lower Atlantic and Gulf coasts of the United States, including Texas and California.

The State of Sinaloa, in Mexico, exports annually to American markets 2500 carloads of tomatoes. Up to March 15 of the last winter season 9000 carloads of various vegetables and bananas had been shipped to the United States from Sinaloa and Nayarit, in Mexico. In addition Cuba and Porto Rico sent us winter crops of tomatoes, peppers, eggplants, squash, cucumbers, lima beans and pineapples, all of which can be produced in abundance in the United States.

A Baltimore firm of importers is advertising in the local papers: "A new crop of fancy Italian tomatoes, the season's first shipment which has just arrived on steamship Libertyland."

While tomatoes, onions and other vegetable products are coming into this country to an ever-increasing extent from foreign countries, our own farmers are suffering from lack of adequate protection against this foreign raised stuff.

In the same way our cement makers are suffering on account of the heavy importations of foreign cement; our structural steel interests find an ever-increasing competition from foreign made steel; shelf hardware of all kinds, barber supplies, and a thousand and one other things are coming into this country to an extent that endangers our own industries and threatens to bring about either a heavy loss on American products, or else a heavy decrease in wages, either of which would be disastrous.

The American farmers and farm labor are confronted with the same problem as that which confronts American industry and the factory worker. If we are to maintain American standards of living and high wages, in spite of greater efficiency methods, we must be protected from cheaply produced foreign goods, whether in the raw or crude state, partly or wholly manufactured.

INCREASING DEMANDS FOR SOUTHERN BONDS.

THE New York Times in a recent issue discussing the broadening market for Southern State and municipal securities said:

"Keen bidding which has marked the sales of bonds by Southern States and municipalities has brought retail prices of these issues to a point where they very closely approximate the market for similar obligations of Northern communities. It is only comparatively recently that Southern municipal bonds have found a ready market with Northern investors. Southern communities now guard their credit as jealously as do Northern municipalities, and as a result they obtain high prices for their bonds."

THE 1928 BLUE BOOK OF SOUTHERN PROGRESS.

PREPARATION of the 1928 Blue Book of Southern Progress, covering the year 1927, will shortly begin. The MANUFACTURERS RECORD endeavors to make this annual publication, dealing with the material development of the South, as complete as possible. Each year facts are given as to the present progress of the South, its resources and opportunities; of the ramifications of its business activities and the magnitude of its material accomplishments. It is an endless task to collect and collate every fact of importance in the upbuilding of the South, but, in order to secure as complete and accurate information as possible, the MANUFACTURERS RECORD asks your co-operation to the extent of notifying its editorial department of any outstanding features in 1927 pertinent to the progress of the South.

The statistical matter in the Blue Book of Southern Progress under main group heads, beginning with areas and altitudes in the South, gives population census figures and estimates, distribution, nativity and negro; farm and farm values; production and value of crops and agricultural products; livestock; fisheries; a general survey of Southern industries, textile, lumbering, furniture, naval stores, fertilizers, iron and steel; power development; mining and minerals; general construction; highway development; motor vehicles; railroads; foreign trade; banking; building associations; life insurance; education; State government expenses and receipts; Federal taxes; property and wealth valuation, etc.

The foregoing are some of the subjects covered and in each annual issue new topics are discussed and the past year's activities are tabulated, bringing the statistical summaries as up-to-date as possible. Last year's issue contained 368 pages.

The Birmingham Age-Herald calls the Blue Book of Southern Progress "an encyclopedia of the South; a handbook in which facts and figures have been so marshalled that no one can possibly rise from a study of the Blue Book without having a broader knowledge of the South and a greater amount of information about that section than he ever had before."

Hundreds of similar statements as to the value of the Blue Book of Southern Progress have been received by the MANUFACTURERS RECORD and, as in previous years, we promise to make the new issue even more valuable as a source of information about the South and its development. Every annual issue is an advance upon former issues and the Blue Book of Southern Progress has now become the accepted encyclopedia of information about the South.

RECIPROCAL GOODWILL.

FLORIDA and Maine are showing the right sort of reciprocity in their endeavor to be of mutual benefit to each other. Says the Ocala (Fla.) Star:

"Daytona Beach, Fla., and Augusta, Maine, are exchanging courtesies in a novel way. Following out the idea that reciprocity is as effective in advertising as in trade or commerce, in the Volusia County Farmer, G. M. Randall, editor, ran an advertisement setting forth the advantages of Augusta as a pleasant place to spend a summer vacation. Returning this compliment, eight business houses of Augusta paid for insertion in the Kennebec Journal, published at Augusta, of a full page advertisement using the slogan, 'Florida in Winter, Maine in Summer,' with five large illustrations and text matter descriptive of Daytona Beach and Volusia county."

Maine has recently been very friendly toward Florida. While the two States are far apart anything that promotes this feeling of friendship should be encouraged.

THE INHERITANCE TAX HEARING.

UNDER a handicap of heckling by members of the Ways and Means Committee and of extraneous political discussions, a delegation of substantial citizens, including representative men from the whole country, last week appeared before that committee of Congress to urge repeal of the Federal inheritance tax. Opponents of such repeal also were heard, but without acrimonious interruption.

On the line of heckling, Representative John N. Garner of Texas, ranking Democrat on the committee, and Representative Henry T. Rainey of Illinois, also a Democrat, asserted that the proponents of repeal formed, in Mr. Rainey's words, "the most expensive lobby" he ever had seen, and much of the committee questioning and of the debates between the committeemen and witnesses related to payment of the delegates' expense accounts. On political lines, debate arose as to whether Governor Smith of New York was an advocate of the Federal inheritance tax.

As the first speaker in favor of repeal, Senator Trammell of Florida urged that Congress relinquish the field of inheritance taxes and declared that the 80 per cent credit clause of the Federal law was an effort to force all the States to levy an estate tax that would be uniform.

That Florida has been misunderstood on the estate tax question was the assertion of W. E. Kay, who explained that from its earliest days the State had been dependent for revenue on ad valorem levies and licenses; this policy, he added, had merely been reiterated in an amendment to the Constitution as urged by the late William J. Bryan. Both Henry Ford and John D. Rockefeller, said Mr. Kay, while owning homes in Florida, still are residents of their respective States, and he denied reports, voiced by Mr. Rainey as a fact, that 1200 millionaires had taken up residence in Florida to escape inheritance taxes. Of course, the statement that there are 1200 millionaire citizens of Florida was asinine.

The first clash between members of the committee and witnesses occurred when Chairman William R. Green of the Ways and Means Committee told John M. Kirby of Texas that the hearing room had been "packed" by Mr. Kirby's group, and Mr. Kirby sharply replied that he did not represent any "selfish" interest.

"We are here as citizens," said William H. Blodgett, tax commissioner of Connecticut, "to protest against the States remaining longer in a straitjacket of taxation induced by the Federal Government," and added that he favored a State inheritance tax. "It is an error," said Mr. Blodgett, "to say that men of wealth leave Connecticut or any other New England State to avoid taxation."

First parrying any heckling in regard to "lobbying," former Judge Oscar Leser of Maryland described the Federal inheritance tax as unfair and cited a hypothetical case of a father bequeathing a million-dollar estate to a son. In Maryland, he showed, such an estate would pay a tax of \$41,500, while in Illinois the Federal tax bill would be only \$8300. Under the Constitution, he argued, Congress could not impose a higher customs duty in Maryland than in any other State, "yet, under the inheritance tax, you take \$41,500 from Maryland and only \$8300 from Illinois," he added.

"But, the idea is to make estate taxes uniform throughout

the country by causing all the States to enact identical measures," commented Representative Cordell Hull of Tennessee, in effect.

"There are towns in Ohio with tax rates of 4 and 5 per cent," replied Mr. Leser; "In my town it is 2 per cent; are you going to legislate in Congress to make this uniform? Who is running the State of Maryland? We are running our State and we don't want Congress to tell us how we must raise taxes which we don't need and don't want. What would you say of a bill that fixed the tax rate in Maryland at 4.15 and in Illinois at 0.83, which is the effect of this plan. If you can do that in inheritance taxes, you can do it with the tariff or the income tax. It will be setting a dangerous precedent."

Sharp criticism of the committee members in heckling witnesses favoring repeal was expressed by A. P. Frymire of New Orleans, who declared that in some States the remarks of the hecklers would not be used "unless you were going to pull out a pistol" and added that the committee could get its information "without attempting to chastise anybody."

As to the National Council of State Legislatures, of which some of the Southerners are members, and which strongly urged repeal of the Federal law, J. A. Arnold, manager of the American Taxpayers League, had little to say, but told of the activities of the latter organization.

WILL INTEREST ON AMERICAN INVESTMENTS IN GERMANY HAVE TO BE REINVESTED IN GERMANY?

A REPORT was recently published to the effect that investors in Germany securities would have to reinvest their interest from these securities in Germany. In reply to a letter to a well recognized authority on such subjects, the MANUFACTURERS RECORD has the following interesting statement:

"In reference to your letter of November 2, in which you quote a statement from some paper to the effect that 'American investors in German securities could not have the interest on these securities sent to America, but must hold it in Germany or must reinvest it in German enterprises,' the issue involved is a very intricate one.

"Simply stated it is this: The Treaty of Versailles, Article 248, provides that the transfer of reparation payments shall have priority over any other transfers. It is agreed that Germany cannot transfer both the Dawes annuities and the interest on private American loans. If this should prove to be true and it should finally be decided that the Dawes annuities do have priority, then interest on American loans could only be paid in German marks and all the recipients could do would be to reinvest them.

"However, the Council of the Bank of England and many other authorities hold that the Dawes Plan superseded Article 248 of the Versailles Treaty and that the Dawes annuities do not have priority. This is not the view of Parker Gilbert, who, in the recent advertisement of the Prussian loan, compelled the bankers to insert a statement saying that they had not asked for this loan to be exempt from Article 248.

"The position of our own Government seems to be that the question may become academic only, and they are trying to avoid an outright decision. If you ask them why they take this view, and if they are willing to talk to you confidentially, they will say that no sensible person really believes the war debts or the Dawes annuities are ever actually going to be paid, over a period of years, and that such cancellations and revisions will be made in both as to preclude any possibility of Germany not being able to transfer the interest on private American loans."

FLOUR CORPORATION TO PUSH TRADE ABROAD.

PRACTICAL steps for developing the trade in American flour in Europe are contemplated by a number of American millers, who have undertaken the formation of an organization to be known as the American Soft Wheat Millers Export Corporation, with headquarters in the Produce Exchange Building, New York city. As explained by E. H. Libbey, Washington, D. C., secretary, in a letter to the MANUFACTURERS RECORD:

"We can best describe our association by saying that it is a combination of a group of mills, organized under the Act of Congress commonly known as the Webb-Pomerene law, which will become effective when entered into by a sufficient percentage of this well defined group, for the purpose of eliminating among its members competition on the sale of their flour for export, which competition is confined almost entirely to itself as a group; also, for advancing and maintaining a satisfactory price on their flour for export and selling at this uniform price through a central selling agent, who will be working for them on a salary and who will allot the business obtained fairly among its members."

Already, 40 concerns have subscribed for stock in this corporation, among them being the following from the South: Bowman Brothers, Gaithersburg, Md.; Derwood Mill, Derwood, Md.; A. W. Ecker & Son, Thurmont, Md.; Felton & Kelly, Frederick, Md.; Hickerson Brothers, Rockville, Md.; Kline Brothers, Boonsboro, Md.; Liberty Milling Company, Germantown, Md.; R. H. Lansdale, Sandy Spring, Md.; C. E. Routzahn, Breathedsville, Md.; D. A. Stickell & Sons, Hagerstown, Md.; Summit Milling Company, Gaithersburg, Md.; Jefferson Milling Company, Charles Town, W. Va.; Round Hill Milling Company, Round Hill, Va.; Wilkins-Rogers Milling Company, Washington, D. C.

Designed as a supplement to the Sherman Anti-Trust law, the Webb-Pomerene Act, summarized, permits combinations or associations of persons in the United States for the purpose of selling American goods abroad at prices which would compete with foreign manufacturers or combinations. In short, mergers which might be regarded under the Sherman law as in restraint of American domestic trade are permitted for the stimulation of American trade abroad in any specific line, which also possibly may mean stimulation of such trade in general.

Other encouragement for development of American trade abroad is furnished in the Edge Export Finance law, under which an American corporation organized for the purpose may issue debentures based on sales abroad, and through the sale of these, to American or other investors, receive virtually spot payment for such goods, the securities to be redeemed when payment is made by the purchasers of the goods. Thus, flour men, for instance, are enabled, if they wish, to form such an organization for the financing of their flour sales abroad.

WANTS INFORMATION ABOUT SOUTHERN EXPORTS.

THE American Consul, Raymond H. Geist, Alexandria, Egypt, in a letter to the MANUFACTURERS RECORD commenting on the value of the Blue Book of Southern Progress and making some suggestions in connection therewith, writes as follows:

"I take pleasure in saying in this connection that the book is very admirably prepared and contains a great deal of information that must be of general interest not only in the United States, but also abroad. It is noted, however, that Southern ports in 1926 handled over 38 per cent of the export

tonnage of the United States. In view of the fact that you are making a certain distribution of this book abroad, it is possible that an export section, containing principally the names and addresses of firms desiring to market their products abroad, might be helpful. At the present time, for instance, Egypt imports nothing but lumber from the Southern States. It is possible that a more detailed discussion regarding the products exported and the firms who are seeking export connections might be of value."

A GREAT GERMAN BUSINESS COMBINATION.

SOME idea of the practical fashion in which German industry works toward domination of world trade in many lines may be gathered from information forwarded to the Department of Commerce by United States Trade Commissioner Theodore Pilger, at Berlin. First citing "the unusual adherence of Germans to co-operative organizations" as "one of the most characteristic features of all German life," Mr. Pilger shows the practical working of the German movement.

In the first place, it appears, "nearly every German manufacturer or business man belongs to some association" and, in turn, nearly all of these associations belong to the next greater associations, and now, as the climax, "all of the second greater associations are now cemented together into the National German Industrial Associations," or, *Der Reichsverband der Deutschen Industrie*, in the German tongue. This association has had its present existence only since February, 1919, although the principle, in somewhat desultory fashion, had been in practice for many years. The present *Reichsverband* owns and completely occupies a building in Berlin.

As explained by Mr. Pilger, the association has four different types of members: Industrial associations, whose main object is to promote the interests of a particular industry throughout Germany; industrial and commercial associations interested in a wider variety of general economic questions, in some particular local district or section of Germany; large important individual industrial companies, and individual persons who are engaged in prominent industrial enterprises. The first group, described as by far the most important, is itself divided into 27 major sub-groups, which include representatives of practically all the individual German industries.

Through representation of each group in the board of directors, the voice of every member, from greatest to least, may be heard in the highest industrial councils of the nation, and all are said to carry equal weight. Nineteen committees carry out the work of the super-association, such as a commission for commercial politics, committee for banking and credit matters, traffic committee, committee for legal trade protection, insurance committee, committee for the reorganization of the trade press, managing committee of the cartel office, general committee of the cartel office, tax committee, etc.

"This outline of the activities of the *Reichsverband* might be multiplied a hundredfold," says Mr. Pilger, "if one were to tabulate all of the economic problems which the *Reichsverband* works upon under each of the major headings."

The *Reichsverband*, he adds, does not obtain money from the Government, but is supported entirely by membership dues.

While the *Reichsverband* is said to correspond in some respects with the Department of Commerce in the United States, there must be between them the tremendous difference that arises between a public, Government agency and a private enterprise.

"In the recent remarkable recovery of German industry, there can be no doubt that a large share of the credit for this accomplishment must be attributed to the organization and activities of the *Reichsverband der Deutschen Industrie*," Mr. Pilger concludes.

THE SOUTH'S SYMPATHY GOES OUT TO NEW ENGLAND IN ITS FLOOD DISASTER.

IN an attempt to express to our New England readers the sympathy of the South in the great disaster which has come upon that section by reason of the flood situation, the editor of the MANUFACTURERS RECORD has addressed to every New England subscriber the following:

"The flood disaster which has come upon New England, bringing to its people much personal suffering, many deaths and great losses, calls forth the deepest sympathy of the people of the South. It brings into clear relation the fact which should never be forgotten by any part of the country, that this is one land and whatever brings suffering to one section means suffering for the entire body.

"The readers of the MANUFACTURERS RECORD fully understand that this paper has always given the most unstinted praise to the magnificent character and energy and initiative of the people of New England. It has never voiced the thought of some that because a few industries have been removed to other sections New England is in any way whatever decadent. On the contrary, I have constantly felt that New England will continue to go forward and that new industries will take the place of those that may be moved away and its prosperity will continue through all the coming years. I can, therefore, enter into the heartiest sympathy, and in this I know I voice the sentiment of the people of the entire South, with the great suffering which has come to New England from this disastrous flood situation.

"In some way the National Government, which controls the rivers and harbors of the country, must, it seems to me, take a broad-gauge empire-building view of the whole situation and prepare a plan broad enough for the entire country to control the rivers in times of floods, and thus prevent the enormous losses of life and property which have been recurring for so many years. Surely this country, with its vast wealth, is abundantly able to spend the money that is necessary in its control of the rivers, to protect New England, as well as to protect the entire Mississippi Valley from the Lakes to the Gulf and from the Rocky Mountains to the Alleghenies. As a united nation, working for the prosperity of all sections, we should go forward on a scale in keeping with our resources and our wealth and the nation wide vision of American business men, though Congress may, perhaps, be slow to act unless the people of the country get back of Congress and press for immediate action.

"Heavy as have been the financial losses through this flood disaster, the deaths which have been brought about and the mental and physical suffering which has been entailed, all appeal with tremendous force to every lover of humanity, and I trust that in extending to you the sympathy of the staff of the MANUFACTURERS RECORD you will at the same time appreciate the fact that I am but giving voice to the sentiment which prevails throughout the entire South in heartfelt sympathy with the people of New England whose loved ones have been lost or whose property has been swept away."

INDUSTRIAL DEVELOPMENT NEEDED IN FLORIDA.

FROM C. O. Simmons, consulting industrial engineer, Miami, Fla., this paper is in receipt of a letter suggesting the importance of the people of that city giving attention to industrial development. Mr. Simmons' point is a good one, but what he suggests for the Miami section is equally necessary for the entire State.

Florida's industrial development is in its infancy. There are many possibilities in that State for the establishment of one industry and another, giving employment to men and

women alike, and creating wealth for the community and the State. It is probably safe to say that there are hundreds of thousands of people in this country who would gladly move to Florida and locate their permanent homes there if they were sure of finding profitable employment in industrial enterprises. Such people cannot in all cases be farmers; they cannot find jobs as clerks, and, therefore, they are unable to live in that State, because of the lack of opportunity in varied industrial enterprises for profitable work.

There are many resources in Florida on which to base industrial development. There are many raw materials not utilized at present or utilized only to a small extent. Every community should have a careful study or survey made of what industries it has, and what might be established to advantage and thus help to create an atmosphere of industry for the enrichment of the community and the State through the employment of men and women and boys and girls who are now deprived of that opportunity.

Much care should be exercised in studying these problems. It would be a waste of money to put it into enterprises doomed from the start to ultimate failure, because of lack of raw materials or freight rates or management. Every unprofitable enterprise hinders the development of profitable enterprises. To the study of these problems the business men, bankers and the public men of the State, and the railroads especially, may well give close attention.

ARE YOU GETTING YOUR SHARE OF THIS TRADE?

THE extent of industrial and highway construction development throughout the South is on a scale never before seen in that section and greater, we believe, than ever before seen in any other part of the country. Outstanding activities in electric power development, steam and water, are on a gigantic scale. Everywhere construction is being pushed with increasing intensity. Great industrial enterprises are being established and some of the big interests of other sections are being moved to the South. A study of the Construction Department in this issue would well repay every business man in the country, for in this study he would see a magnitude of operations startling in their significance and suggestive of the vast opportunities being opened for business.

The buying power of the South is increasing at a tremendous rate and the extent and variety of the things being purchased are great enough to open up new avenues for almost every line of human activity. The business men of the South, as well as those of the North and West, as they study these facts may well ask themselves "Am I getting my fair share of this trade and if not, why not?" "Is my selling organization alive to the situation and doing its utmost to secure this business?" "Am I studying these matters with sufficient care to see wherein I may be falling short in reorganizing and seizing the opportunity?"

Here is a field for study to which every business man should at the moment devote his time. We suggest, therefore, that every reader of the MANUFACTURERS RECORD make a careful examination of the Construction Department in this issue and the Construction Department published every business day of the year in our Daily Bulletin, and thus get a better understanding of what is going on and see how he can utilize the opportunity.

HELP FOR THE HELPLESS.

IN a letter to this paper Chairman John Barton Payne of the Red Cross advises that "there is great need for winter clothing among thousands of Mississippi flood sufferers," and an appeal has been made to its chapters to collect, or make, as soon as possible, "very large quantities" of garments. Months have passed since this disastrous flood drove thousands of women and children and men from their homes—indeed, in thousands of cases actually wiped homes, and even the ground on which they stood, completely off the face of the earth. Months have passed since the flood subsided; yet thousands continue homeless and in dire need and thousands who have returned to their homes face privation in the face of the winter season.

Relief in generous measure has been extended, as far as possible, to the flood sufferers; but thousands still need generous help. Well may the Red Cross appeal for such clothes for suffering children as coats, underwear, girls' dresses, boys' suits and shirts, socks and sweaters, of all sizes, and layettes and baby clothes. For the women are needed coats, dresses, underwear and stockings, and for the men coats, suits, shirts, underwear and socks. Charges by mail or express to central shipping points will be paid by Red Cross chapters.

The men, women and children in whose behalf this appeal is issued are not mendicants, either in character or by practice. They are the innocent victims of a visitation of nature. They are entitled to such relief. They are not responsible for their present plight.

And with each offering well might go a little prayer, both for relief and strength for the sufferers and that the nation, through its Government, may take adequate steps to prevent recurrence of the disaster ever in the future.

ONE REASON FOR VIRGINIA'S PROGRESS.

BY no means the least important stimulus contributory to the present constructive development of Virginia, particularly on industrial lines, is the revision of the tax laws of the State in a practical and reasonable manner, which encourages outside industries to turn to the Old Dominion for manufacturing sites. Already, the Allied Chemical Corporation is establishing a gigantic plant in Virginia, and recently the E. I. du Pont de Nemours Company announced the purchase of a large tract near Richmond for the probable erection of a Rayon plant.

Further than this, it is reported to the MANUFACTURERS RECORD, many residents of the State now are contributing to its support and advancement, through tax payments, who hitherto had been legally able to stand aloof. Tax Commissioner Morrisett, it is cited, in his administration of the tax laws, has doubled the number of income tax payers in the last year, raising it from 32,000 to 64,000, thus not only increasing the income of the State, but also enlisting the earnest and active interest in its welfare of thousands of persons who formerly had no occasion to worry over how the State's money was expended.

In its way, taxation—national, state and local—is one of the most influential features in the development or retarding of prosperity and growth. Virginia seems to have handled the problem in efficient fashion, and beneficial results may be expected soon to be forthcoming in abundance.

A WISE APPOINTMENT.

J. G. CARLISLE, at one time general freight agent and assistant freight traffic manager of the Central of Georgia Railway, but more recently connected with the Missouri Pacific, has been appointed director of industrial development, with jurisdiction over the industrial department of that road. The MANUFACTURERS RECORD congratulates the Missouri Pacific upon this wise appointment.

POSSIBLY A BLESSING IN DISGUISE.

MRS. MURRAY BOOCOCK, Keswick, Va., in requesting that copies of the MANUFACTURERS RECORD containing the address of Frank A. Goodwin should be sent to several names that she mentioned, writes:

"I hope you will keep on publishing articles that will awaken this senseless, sleeping nation."

Our nation has, indeed, been asleep. We have long been trying to wake them up. Possibly the Sacco-Vanzetti case may be the means of waking our people to the whole situation, and thus in the end prove a blessing, rather than a curse.

THIS COUNTRY INSTEAD OF EUROPE THE PROPER FIELD FOR AMERICAN CAPITAL.

ROBERT RANSON, St. Augustine, Fla., in a letter to the MANUFACTURERS RECORD writes: "If Florida could get half the money that has been invested by Wall Street in German steel trusts, etc., to develop her natural resources now going begging for capital, it wouldn't be long before our population would measure up to the realtors' hopes and our population and prosperity increase a hundredfold."

Not only is this true as to Florida, but it is equally as true as to the whole South. Our international bankers are pouring millions and, in the aggregate, billions into foreign investments, when this country could furnish a field for profitable investment for every dollar of its available capital. We need to do a thousand and one things in America requiring capital investments. But instead of consecrating their thoughts and study upon the South and the West and the Pacific Coast, international bankers are putting forth apparently their greatest efforts to turning capital into European investments, many of which in all human probability will never be paid.

UNWISE CRITICISM.

A STATEMENT which is being rather widely quoted credits H. G. Gumprecht, president of the Sub-Exchange Managers Association, affiliated with the Florida Citrus Exchange, as criticising the possibility of the Texas grapefruit industry becoming of permanent value, claiming that, while the fruit is on a par with Florida's, the groves may eventually be wiped out through frost. Such statement as that is thoroughly unjustified.

Florida has too many good things in its favor for anyone connected with the citrus industry of that State to attempt to belittle the rapid development of the citrus industry in other parts of the South. Alabama and Louisiana are becoming important centers for the Satsuma orange business. The Texas Gulf Coast is rapidly developing a great grapefruit industry. There is no reason, so far as we can see, why Florida should be jealous of any of these sections, or of their progress.

Florida has its own problems to meet in better marketing of its fruit, and in keeping bad fruit off the market, and in persuading the Florida hotels to use first class citrus fruit, which many of them never do.

Improved Highways at Low Cost for Sparsely Populated Regions a Challenge to Road Builders.

CHEMISTS MUST SOLVE THE PROBLEM AS THEY HAVE SOLVED MANY OTHERS.

The time has come when road service must be provided for the public generally, as well as for the more thickly populated communities, and this subject is now one of the foremost of those that confront the American road builder. This is the opinion of Charles M. Upham, director of the Highway Research Board and former State highway engineer of North Carolina, and of C. N. Conner, who has been working under the direction of Mr. Upham for two years on a survey covering all types of low cost improved roads. The results of this survey will be made public at the annual meeting of the Highway Research Board of the National Research Council, to be held in Washington, December 1 and 2, and will, it is believed, attract to the meeting the largest and most representative gathering of road builders since the organization began functioning 10 years ago.

"It is only necessary, in order to realize the magnitude of the possibilities in intermediate and low cost road construction, to consider the road mileage of the United States in the light of the latest figures available," says Mr. Conner. "The public highway system of the Nation, exclusive of city streets, consists of 3,000,000 miles of road, of which only 550,000 miles have been improved with any kind of surfacing, leaving a totaled unsurfaced mileage of about 2,500,000. Of the 550,000 surfaced miles, approximately 375,000 miles are surfaced with sand-clay and gravel; 109,000 miles with waterbound macadam, surface treated macadam and gravel, and bituminous macadam, leaving only about 56,000 miles of the higher and miscellaneous types.

"There are now in the State highway systems 287,900 miles, of which 163,000 miles, or 57 per cent, are surfaced. Only 109,000 miles—two-thirds of the entire surfaced mileage on the State systems—is of what may be termed transient types; that is, before economic maintenance results, they must be largely lifted to higher types, or the present types be greatly improved.

"The local road situation gives even greater reason for concern. Of the 2,731,000 miles remaining after taking out of the State mileage, 376,000 miles are surfaced, or 14 per cent. Of the surfaced mileage, 347,000 miles, or 92 per cent, are sand-clay.

"Thus, of the total of approximately 3,000,000 miles of highway in the country, about 85 per cent are unsurfaced, 10 per cent have a low type surfacing, 4 per cent have an intermediate type of surfacing and less than 2 per cent have a high type of surfacing.

"The increase in all classes of motor transportation has now reached such a point that attention cannot be confined solely to the development of the high type road surfaces. Traffic must be moved to and from the isolated sections and between objective points; traffic congestion on main highways must be relieved, and the safety of all highways increased. When we compare the total mileage of highways of all types with the very high percentage of the lower types of surfacing, and then consider further the ever-increasing motor vehicle registration, we are forced to the conclusion that immediate improvement of the lower class roads is essential.

"The reasons for improving this large mileage are: To increase traffic capacity, to make them serviceable at all seasons

of the year, to furnish smoother riding surfaces, to prevent loss of surfacing material, to reduce the dust nuisance and to increase their safety. In addition, highway builders are realizing more and more the value of progressive, or stage, construction, which means building upon a suitable subgrade a subbase and surface which will carry traffic for a time at least and which will later be of value as a base course for an added, new surfacing of more substantial material."

The paper which Mr. Conner will present will discuss in more or less detail 20 to 30 types of low cost roads, which include untreated surfaces, various types of surface treatments and surface courses. The untreated surfacing in general is limited to a maximum cost of \$10,000 for an 18-foot width, and surface treatments and surface courses to cost a maximum of \$6000 per mile for an 18-foot width.

The report will stress the economic use of local materials by themselves and combined with shipped-in admixtures of various types, principally bitumen. The intelligent use of such materials has already given road service to many communities where it is now a question of having a medium type of surfacing or no surfacing at all; for, they must have reasonably good roads generally, rather than provision of elaborate facilities in certain places. Other communities are experimenting with various types of roads and many are waiting for research and investigation to provide necessary information before undertaking construction.

The following topics will be treated separately: (1) Materials of construction and maintenance; (2) Methods of construction and maintenance; (3) Cost of construction and maintenance; (4) Selection of type; (5) Selection of cross section; (6) Effect on type of climate and soil; (7) Service, traffic capacity and cost of various types; (8) Maintenance and construction equipment.

Untreated surfaces to be discussed will include: Top dressing, or traffic bound, types; sand-clay, gravel and macadam. Surface treatments and surface courses will include: Dust layers of calcium chloride, and bitumen, thin surface treatments, mixed in place bituminous surfaces of both fine and coarse aggregate types, surfaces and surface treatments by both hot and cold mixed processes, natural rock asphalts, bituminous concrete and bituminous macadam. Some of these types cost more than \$6000 a mile, but they will be included to show their relative importance in this investigation.

The building of low cost roads will, it is pointed out, make possible the building of higher type roads in the future; for, without a serviceable highway connecting objective points, a comparatively small number of vehicles can be used; whereas, road service for a much larger number may be maintained by the construction of roads within the limits of funds available. Then, in course of time, when traffic conditions warrant and the life of the lighter type construction has passed, funds will become available for a higher type, due to the fact that the community has prospered and can afford a more permanent type of pavement; but, without first constructing the lighter type, the period of prosperity might have been indefinitely delayed. Besides, practically all of the types included in this survey will have some salvage value, the lower limits of which will be as a subgrade treatment and the higher as a base for improved types of construction.

A practical application of the results of this survey will

be made by showing the various steps of typical stage construction. Starting with the raw subgrade, covering it with low cost aggregates and thus increasing its traffic capacity; then, when this surface has passed the point of economical maintenance, applying a surface treatment as a surface course which will lay the dust and at least double the traffic capacity and illustrating still further this salvage possibility by using this base with its surface treatment as a foundation for a high type pavement.

The investigation was originally started as the "Earth Roads investigation," but it was found that very little successful work has been done on earth roads and that a majority of engineers were not interested in earth roads as a type, because of their low traffic capacity. Engineers are, however, greatly interested in the use of local materials for building low cost roads with traffic capacities of 300 to 500 vehicles daily, including a fair percentage of light trucks. While there are portions of the North Atlantic States which need low cost roads, the big field for this work is in the isolated thinly populated sections, and this includes large areas in the South and Southwest and in the region generally between the Mississippi River and the Rocky Mountains. Most of the isolated communities are not now in a position to pay for a high type road, at least over any extensive mileage, and, besides, there is not sufficient traffic to warrant such construction. Many of these low cost roads have been shown by tests to be smoother than some of the old water-bound macadams and comparable in riding qualities with some of the high type surfaces now used. Speeds of from 40 to 50 miles an hour can be maintained with safety and are limited only by grades and curves.

Actual construction of low cost roads, developed as a result of research and advanced ideas in construction methods and maintenance, have given some States a very large mileage of untreated surfaced roads in a comparatively short time. New types of surface treatments and surface courses which may be built without detouring traffic are used successfully. There are indications that smooth surface courses free from dust with a traffic capacity of 800 to 1500 vehicles a day will, in the next few years, be giving year-around road service to many sections now without it.

This investigation should be particularly interesting and of inestimable value to smaller units, such as counties, districts and small towns, which may benefit by the experience of others in the selections of types, construction and maintenance methods. The use of local materials makes low cost roads possible. It is, of course, necessary to ship in binders and cement, but it is pointed out that these are seldom more than 15 per cent of the total mixture. New, successful methods of treating and mixing local materials have been developed in the last few years. The salvaging of old, rough macadams and providing smooth riding surfaces on them by means of a surface course is one of the important recent developments.

The investigation is also of interest to the manufacturers of tar, asphalts and non-bituminous binders and dust layers. It is said that practically all the manufacturers of the above line of materials now have in their personnel trained highway engineers whose previous experience in highway construction, design and investigation splendidly fit them for promotion work in this particular field. They not only closely follow the work in the field, but also are the point of contact between State, city and county engineers and the industry they represent.

"Highway construction is one of the oldest arts, yet it is only recently that it has made any great strides," says Charles M. Upham, one of the country's best known road builders. "When road construction is analyzed and properly regarded from a true economic standpoint, it is quite evident

that the greatest economic strides are yet to come. For the most part, the present practices in road building consist of the physical manipulation of chemically prepared products. Beyond the preparation of materials, the chemical engineer has taken little active part in road construction, and perhaps one of the reasons why no greater advance in road construction has been made is because the chemical engineer has taken no great interest in the industry. The chemical engineer, as regards the road building industry, will be remembered for what he is going to do, rather than what he has already done. I can see no greater service the chemist can render than in the development of materials that will permit of the building of great mileages of low cost roads."

Mr. Upham further pointed out:

"The traffic on the large mileage of unimproved roads does not justify the construction of expensive pavements. Therefore, the most formidable problem that confronts the road builder is the perfection of certain types of low cost pavements that will satisfactorily take care of a reasonable amount of traffic throughout the year.

"The chemist already has played an important role in the development of certain materials now widely used in road building; included are: Portland cement, asphalt, tar, brick and steel. Other materials for which the chemist is largely responsible and which are being used in small quantities in the construction of roads include: Lime, hydrated lime, calcium chloride, sodium silicate, ligno-sulphate liquors and others.

"Perhaps, no other manufactured material is as widely used in road building as cement, and it is extensively used in the construction of bridges and other structures which form a part of the highway. Chemists are constantly working to increase the strength of cement. Quick hardening cements were developed by the chemist. Asphalts manufactured under the guidance of the chemical engineer form one of the main materials of road construction. Tar is another product in the production of which the chemist has played no small part. The present art of manufacturing pavement brick is the result of exhaustive research with the chemist's aid. Great strides have been made in the improvement of steel as a direct result of the work of chemical engineers. This material plays an important part in the road industry, not only in the construction of bridges and reinforcing of roads, but also in the manufacture of road building and maintenance equipment. Lime and hydrated lime are being used in road construction. Calcium chloride has been used in concrete as an accelerator. It is proving effective as a dust layer, and is claiming the attention of road builders in the curing of concrete. Sodium silicate has been used as a binding medium. Ligno-sulphate liquors have been used in the manufacture of certain road binders.

"Suggestive of the problems which the chemist may set about to solve may be mentioned the following: (1) Provide asphalt and tar binders that will act the same in cold weather as in hot weather and be little affected by temperature changes; (2) Develop a method to chemically change local clay in such a manner as to give it characteristics more nearly resembling sand. Clay is one of the expensive and difficult factors to deal with in road construction. In certain clays up to 15 or 20 per cent can be handled satisfactorily in road work, but there are many places where the percentage of clay is so great that it is difficult to construct not only a low cost road, but also a standard type pavement. Such a discovery would immediately be utilized in the construction of large mileages of low cost pavements on now unimproved roads, which would take care of a large amount of the present traffic and would become a part of the future primary road system of the country.

"There is a strong possibility that, through experiments and research, chemists may discover new materials and methods of construction that will result in almost immediate savings of millions of dollars in road building and may change the entire art of road building. Here is an opportunity for service that challenges the best that American chemists are able to offer. In perhaps no other industry is there an opportunity to serve in such large measure modern civilization."

Ballyhoo Bill Thompson's Ballyhoo for Flood Control Stirs the Nation.

FLOOD CONTROL CONFERENCE IN CHICAGO LEADS TO CONGRESSIONAL INVESTIGATION
OF WAYS AND MEANS NOW IN PROGRESS.

By RICHARD WOODS EDMONDS.

"Ballyhoo Blocks Bellicose River" might very well be a caption for the activities of Bill Thompson, Mayor of Chicago, in his efforts to keep the people of this country interested in the problems of flood control until decisive action is taken.

Ballyhoo was the salient characteristic of Bill's Chicago conference, and ballyhoo was the feature that drew the nation's attention. Ballyhoo has been the conspicuous feature of his efforts since; and ballyhoo was the main feature of the recent descent upon the nation's capital last week when, on Monday, the 7th, his 10 special trains loaded with Thompson boosters, Chicago boosters and flood control boosters, converged in Washington with delegates from the lower Mississippi Valley, from the Arkansas, from the Upper Missouri and the Illinois Rivers. A brass band, quartets of policemen and sailors to sing "America first! and last! and all the time!" accompanied him and kept the spirits of his cohorts at martial pitch.

Never before had I seen a committee of the Congress of the United States at work, and its method of getting down to business, as it did last week, has been a spectacle of lively interest to me. The committee was to meet and start its deliberations on Monday, November 7, at 10 o'clock, in the caucus room of the magnificent House Office Building. At 10 o'clock, or possibly a few minutes before, a messenger brought word to the few of us who had assembled there to report to the Capitol steps for a group picture. Ballyhoo Bill appeared shortly, accompanied by an accordion player, and was greeted with rousing cheers.

After the picture-taking, I was seated in the caucus room before he arrived there. Again his appearance was greeted with riotous applause.

"Just a lot of his political camp-followers earning their salaries," I thought.

The committee arrived, took seats behind the long table on the raised dais at the end of the room, the seats rapidly filled, and a hundred or more stood in the aisles. Ballyhoo Bill was called upon to speak, and I must here begin a series of confessions. Here was no ballyhoo, but a short talk, showing fine feeling and a keen perception of his own part in the program. After telling very briefly of his trip down the Mississippi and back during the flood last spring, he said that many other men were present who had suffered loss in, and who represented districts devastated by, the flood; men who could not stay long. As for him, he could stay all week, if desirable, and could come back at any time during the following weeks of the committee's deliberations in case he was wanted; he would, therefore, yield the floor to other speakers.

During the balance of the morning and throughout the afternoon session many men of great influence in the Valley were called upon to speak. They talked about just two things—Ballyhoo Bill Thompson and the need for complete Federal responsibility for all future flood control measures. Senators, Congressmen, Governors, Mayors—they all said the same things in their different ways. I was surprised and disappointed. I thought no good at all of a man who used the sensational methods of Ballyhoo Bill. I had a contempt for the methods and, therefore, for the man. I couldn't

trust him. A cheap, unscrupulous demagogue was my estimate; shrewd, crafty, quick to appreciate an opportunity and an able organizer, I well knew; but a man, I believed, of low instincts and not to be trusted. Imagine my amazement, then, at the beautiful tribute paid him by Senator LeRoy Percy of Mississippi. I am quoting from memory, but believe I have it almost verbatim. "Big Bill has made enemies in the past, and doubtless he will make them in the future, but he will never make one in the Mississippi Valley. He can't do it. As long as that great river rolls down that valley his name will be spoken there with reverence and love."

There must be more to this ballyhoo artist, this book incendiary, this deadly foe to King George's snoot, this bandmaster and master showman than I realized. John M. Parker, ex-governor of Louisiana and flood dictator of his State during the flood, was one of the men who had spoken of Ballyhoo Bill in this vein; I knew he had given up much to stir up the country for the sake of the Valley, and I knew he was sincere. I felt that he knew me well enough to speak frankly to me, and when I could get to him I asked him "how come?"

"Well," he said, "I told Mayor Thompson a little while ago that I had been doing him a great injustice. I had believed him to be a cheap demagogue, but he had certainly done magnificent work in keeping alive the country's interest in flood control, and if he hadn't shown real, sincere feeling this morning in his talk, I had never seen it. I had come to the conclusion that in this matter of flood control he was entirely sincere."

The next evening in the lobby of the Mayflower Hotel I got another sidelight on the methods of Ballyhoo Bill. There had been two solid days of wearying repetition of the refrain that the Federal Government must assume the full responsibility for the river. Hadn't that been decided long ago? Didn't every man, woman and child in the country know it by this time? Hadn't the President, the influential Secretary of Commerce, the Secretary of War, the Chief of the Army Engineers said it repeatedly and emphatically? Hadn't the United States Chamber of Commerce and numerous other powerful national bodies gone on record to the same effect? Why keep on with the six-month-old refrain when there was no opposition from any quarter? Why not start from that point and proceed to consideration of actual methods for accomplishing the end everybody agreed upon, through the agency everybody agreed must do the job? I said as much to Frank R. Reid, chairman of the committee, when I met him that evening in the lobby of the Mayflower Hotel. He flared up. This was the most important part of it, he said. This was to provide the setting for the inquiry, to determine the policy on which Congress would proceed. His committee would write the bill, but Congress must decide to change the traditional policy.

But while that change was not yet enacted into law, it was decided in every mind, I protested.

"Not in the mind of Congress," he said. "All this two days, and all the ballyhoo that have gone before, are necessary to show Congress the temper of the country."

"Then Congress is lagging a long way behind the coun-

try," I replied. And mulling that over, I came to two conclusions: First, that coming from that source, Mr. Reid's statement of what is required to move Congress is about the most scathing commentary on the intellectual caliber of Congress as a whole I have ever heard; and second, that Ballyhoo Bill is more than the premier ballyhoo artist of the age; he is a leader who comprehends the nature of a large proportion of our people and knows how to interest them.

This article might be artistically complete if I closed on the above paragraph, but the progress of the next two days—Wednesday and Thursday—is worth mention.

The speakers, "witnesses," they were called, ceased to orate for the benefit of 300 or 400 people, and addressed their remarks to the half dozen or so attentive men sitting behind the long table. Gradually a consideration of actual methods of preventing disasters crept into the discussion. Levees were discussed. A representative of Cairo, Ill., and another of Moundville, Ill., showed how higher levees would wreck their cities even though they were never overtopped. The pressure of water at great heights in the river, they explained, forced streams underground and caused sand boils and the spewing up of sewers, graves and building foundations. Increased levee heights would cause sand boils too great and too numerous to be blocked, and their cities would be engulfed. The same danger applies all down the length of the levees; sand boils are a menace increasing with increasing heights.

Spillways and bypasses were discussed. North Dakota presented plans for stopping all floods of the Missouri above Bismarck; for taking out of the river, in other words, a maximum of 25 per cent of the floods that now reach its mouth. E. E. Blake, for the Interstate Commission for control of the Arkansas and Red Rivers, presented detailed, carefully drawn plans for impounding flood waters on those two rivers and thereby rendering them harmless.

Through hours of testimony from any man who wants to present any local scheme for aiding the great objective, the committee sits; through weeks, it must sit, listening to much that is foolish and impractical, asking searching questions that show the study its members have given the subject, making ill-prepared men look like monkeys, exposing the fallacies in one, bringing out the strong points of another, and gradually sifting all in an effort to arrive at such a true and comprehensive understanding of the immense subject as well enable them to frame adequate legislation for enactment by Congress.

Credit Association Urges Tax Reduction.

The National Association of Credit Men, following its recent action in recommending a reduction in Federal taxation, has appointed a committee to co-operate with the Joint Committee of Congress in studying tax revision. It is announced by F. S. Hubbell, director of Public Relations Department, New York city. The chairman is J. M. McComb of New York, vice-president of the Crucible Steel Company of America.

Bids on \$940,000 School Building Program.

Fairmont, W. Va.—Bids on the school building program of the Board of Education of Fairmont Independent School District, Robert C. Jones, president, for which a bond issue of \$940,000 was voted last spring, will be received until December 20, it is announced. The work will embrace the erection of a high-school building, combination high and grade school, annexes to two elementary schools and other construction. William B. Ittner, Inc., of St. Louis, Mo., is the architect.

Details of Alabama Power Company's \$13,500,000 Development at Lock 18—Ultimate Production of 216,000 Horsepower Planned.

Outlining progress on the construction of Jordan Dam at Lock 18 on the Coosa River, near Wetumpka, Ala., W. J. Baldwin of the Alabama Power Company, Birmingham, advises that up to November 1 about 90 per cent of the total excavation work of 487,000 cubic yards had been completed and about 45 per cent of the total concrete yardage of 450,000 cubic yards has been placed. The dam is located just below Mitchell Dam and about 20 miles above Montgomery. Construction was begun in June, 1926, and is scheduled for completion by December, 1928. A certificate of convenience and necessity was granted by the Alabama Public Service Commission on August 6, 1925, and a 50-year license granted by the Federal Power Commission, Washington, D. C., on November 7 of the same year. The project is estimated to cost \$13,500,000.

The dam has a length of 1680 feet with a height of 103 feet to its crest and 125 feet to the deck. Its operating head will be 93 feet and the spillway will contain 17 gates, 18 feet high and 30 feet wide, leaving an open spillway of 724 feet. The power house will be 300 by 61 feet, 105 feet high, and will be equipped with four 36,000 horsepower turbines of the single runner type, directly connected to generators, and four 29,000 kilovolt-amperes, 6600 volt, 3 phase, 60 cycle generators. The ultimate capacity of the plant will be 216,000 horsepower, although it will operate initially at a capacity of 144,000 horsepower.

The content of the power house and dam will involve 450,000 cubic yards of concrete to consist of 190,000 cubic yards of sand, 360,000 cubic yards of gravel and 630,000 barrels of cement, with 1000 tons of reinforcing steel and 1400 tons of structural steel. The dam will create a navigable slack-water pool extending to Mitchell Dam, a distance of 18 miles, and, combined with the pools formed by Mitchell Dam and Lock 12, will make a navigable total of 60 miles of the Coosa River in which the natural fall is 233 feet. Provision has been made for a lock.

No machinery has been installed in the plant, but principal contracts have been awarded as follows:

Turbines—S. Morgan Smith Company, York, Pa.

Generators—Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa.

Switchboard—General Electric Company, Schenectady, N. Y.

Transformers—Pittsfield (Mass.) office of General Electric Company.

Oil circuit breakers—Philadelphia (Pa.) office of General Electric Company.

High-tension disconnect switches—Delta Star Electric Company, Chicago, Ill.

Low-tension disconnect switches—Electric Power Equipment Corporation, Philadelphia.

Structural steel and spillway gates—Ingalls Iron Works Company, Birmingham.

Penstock gates and frames—Hardie-Tynes Manufacturing Company, Birmingham.

Overhead and Gantry cranes—Cleveland Crane and Engineering Company, Wickliffe, Ohio.

Power and control cable—Okonite Company, Passaic, N. J.

Cement and brick for the development will be supplied by local mills and all machinery and equipment will be installed by the Dixie Construction Company of Birmingham, general contractors for the project.

New Freight Rate Classifications for South.

STRONG PROTESTS FROM SOME SHIPPERS, BUT RAILROADS AND INTERSTATE COMMERCE COMMISSION CLAIM NEW RATES WILL BE FAIR.

By GEORGE H. MANNING, Washington, D. C.

Protests of shippers against the proposed revision of freight classification in the South which recently were presented to the Southern classification committee in New York city are not worrying the Interstate Commerce Commission at this time. In the first place, the matter has not yet reached the stage where the Commission can take a hand and, in the second place, the Commission rather expected that there would be many protests when the time came for the inevitable revision.

The freight rate structure in the South has long been in need of revision. For many historical reasons, rates have not been fixed according to any standard or system, and rates in some sections or on some commodities are in no wise related to other rates of like character. Many anomalous and unjustified rate situations exist; therefore, the Interstate Commerce Commission spent five years in drafting a new Southern class rate structure, putting the class rates on a scientific, uniform basis. Using the new Southern system as a model, the Commission now has under way proceedings which will make similar revisions for the other sections of the country. The new Southern class rates have been described in detail in MANUFACTURERS RECORD.

On January 10, or thereabouts, the new Southern class rates will go into effect. This will mean that every one of the 10 classes will be a permanent percentage of the first class rate and that there will be an even digression in these percentages. At present the fifth class rate may be one percentage of first class between two points, but a different percentage of first class between two other points. Also, in some cases, the fourth class rate, for instance, may be actually higher than the third class rate. The new, uniform class rates will be used to move all the commodities which are classified in the tariff publication known as the Southern Classification, albeit this tariff was published before the new scale of class rates was created. Therefore, some articles will have their rates increased and others decreased.

In anticipation of this and also to correct many inconsistencies in the old classification taken by itself, the Southern railroads, through their classification committee, propose to reclassify some 2000 articles, putting some in higher classes and some in lower classes than at present. The railroads deny that such revision is with a view to increasing their revenues, and declare it is to put in the same class articles which have the same transportation characteristics. This revision is not required by the I. C. C., but is expected by it. Minor changes in the classification are being made constantly by the classification committee.

Before publishing the new classification tariff, the committee held hearings in Atlanta, Ga., and Cincinnati, Ohio, at which Southern shippers offered their suggestions as to downward revision and their protests against upward revision. Northern and Eastern shippers also asked for a hearing, since the new class rates and the proposed classification ratings will apply on traffic moving between the South and other sections of the country, and at the suggestion of the Interstate Commerce Commission the Southern classification committee held hearings in New York.

Any changes which the classification committee sees fit to make is a matter to be threshed out between the committee and the shippers, it is pointed out by I. C. C. officials. There will be some changes lowering rates, which the ship-

pers, of course, will welcome; but there will also be some increases which shippers will oppose, pretty much regardless of the justification of the increases. The tariff embodying the new classification will probably be published in the spring, and in the meantime the new class rates will apply on the old classification ratings, which in itself will mean some increases and some decreases. The new classification will be filed with the Interstate Commerce Commission and the public utilities commissions of all Southern States 30 days before its effective date. This will give all shippers an opportunity to study the effects of the new ratings, and they may protest to the I. C. C., which, upon sufficient evidence, will suspend any item of the classification, making it ineffective until a thorough investigation of its justification can be made.

Another phase of the Southern class rate revision is the system of commodity rates. These are rates set up for the special movement of certain named commodities and usually apply only between named points or over designated routes. Commodity rates are almost always lower than the class rates which they supersede and their level is determined by the nature of the commodity, amount of movement, condition of the industry and competition. In the South, largely because of the chaotic class rate structure, these commodity rates were extended to less-than-carload traffic, although in other sections commodity rates apply only on carload traffic.

Less-than-carload commodity rates are generally admitted to be a nuisance, and the carriers announced that they would cancel all such rates coincidentally with the effective date of the new class rates, now tentatively set for January 10. This raised such a storm of protest from shippers that the railroads agreed to postpone this cancellation for a few months, until the new class rates have been given a trial. It is probable that the less-than-carload commodity rates will be retained until the Southern classification committee publishes its new classification tariff.

State public utility commissions have generally sided with the shippers in opposing cancellation of less-than-carload commodity rates, because this would mean increased charges for small shipments while the present classification is in effect. The Interstate Commerce Commission takes the general attitude that less-than-carload commodity rates should be abolished, but an attempt of the railroads to cancel any of them would be liable to investigation and suspension by the I. C. C. upon sufficient protest from shippers. It was with this in view that the Commission readjusted the relationship of the lower rated classes in the South and added two new ones at the bottom, making 12 in all.

Other sections of the United States have freight rate structures better in degree only than the South has, and the I. C. C. is working toward a series of revisions which will give these sections uniform and logical class rates such as the South will have in a few months. Rate levels may be higher in one section than in another, but the scheme of the rate structure will be the same—for instance, the fourth class rate will be approximately the same percentage of first class in one territory as in another.

In the Southwest, the Commission has already issued an order in the Consolidated Southwestern Cases, to take effect in the spring, creating a uniform system similar to that in the Southeast. In Western trunk line territory, hearings are now being held with the same end in view. In Eastern terri-

tory, the States east of the Mississippi and north of the Ohio and Potomac, the testimony has all been taken and the Commission's examiner will probably issue his preliminary report by the first of the year. As an example of the present condition, the fifth class rate, which moves the largest amount of freight of any class rate, between Boston and Springfield, Mass., is 35 per cent of the first class rate, while between Boston and Pittsburgh the fifth class rate is 48 per cent of the first class rate. There is declared to be no reason for this discrepancy, since the first class rate is the key rate and is the rate which figures in all port differentials and other rate adjustments.

The experience of the South in getting adjusted to a new freight rate system which necessarily involves some increases and some decreases will soon be repeated by other sections of the country. In all these revisions an attempt is made to keep the revenue of the carriers at the same level, but in straightening out inequalities and discrepancies in the rate structure some shippers will necessarily have to bear increased rates.

\$7,000,000 Mizner Properties at Boca Raton Sold to Philadelphia Interests—To Be Developed at Once.

West Palm Beach, Fla., November 9—[Special.]—Purchase of the Mizner interests at Boca Raton by Clarence H. Geist, Philadelphia financier and Palm Beach winter resident, and plans for reopening the Cloister Inn and Golf Course this winter as the Seaview Club of Florida, have just been announced here.

Sale of the Mizner properties to Mr. Geist represented a deal of approximately \$7,000,000, it was said, including a payment of \$71,500 in addition to the taking over of all mortgages and obligations on the assets and rights of the Mizner Development Corporation. The property involved extends from the East Coast Railway to the Ocean and includes hotel, golf course, administration building and about 15,000 acres of land.

In announcing the purchase Mr. Geist said the new Seaview Club will be opened formally about January 15. He outlined plans for remodeling the entire property into a sportsman's paradise similar to the Seaview Club of New Jersey, which he has operated for 13 years.

Mr. Geist was accompanied to this city by a staff of aids and by his attorney, G. W. Gedney. Mr. Gedney entered a bid for the property some weeks ago but it was rejected by the referee in bankruptcy as too low. At that time the bid was made in Gedney's name and no mention was made of Mr. Geist. Confirmation of the new deal is expected soon. It has been approved unanimously by the trustees in bankruptcy, it was said.

\$1,250,000 Apartment for St. Louis.

St. Louis, Mo.—A site has been acquired by Herbert M. Edmunds of this city, at 4481 West Pine boulevard, on which it is announced that the Herbert M. Edmunds Building Company will erect a 16-story apartment building to cost \$1,250,000. The property has a frontage of 110 feet with a depth of 213 feet, and was purchased through the agency of Henry R. Weisels. Plans are being drawn, it is said, for a fireproof structure, of brick and stone, to contain 150 apartments of one to five rooms. A commissary will be maintained in the basement and a 100-car garage provided for tenants. The building will be under the management of the Henry R. Weisels Company, Inc.

Florida Organizes A Unique Plan for Developing Tourist Business.

Jacksonville, Fla., November 11—[Special.]—The State of Florida Travel Bureau has been established with Governor John W. Martin as president; Jerry W. Carter, State Hotel Commissioner, as executive vice-president and secretary, and with the other members of the Governor's Cabinet as officers or members of the executive committee, including Attorney-General Fred Davis, Comptroller Ernest Amos and Nathan Mayo, Commissioner of Agriculture. These officers, together with one representative from each city, contributing to the support of the Travel Bureau, will determine the establishment and operation of the bureau.

The certificates will be distributed by motor clubs affiliated with the American Automobile Association and tourist agencies, ask Mr. Foster and other recognized travel bureaus, and by ticket offices of the Seaboard Air Line Railway.

The plan provides for the sale of hotel accommodations on a basis of 40 nights' lodging for \$50.25 for a basic accommodation of two in a room without bath, and also a guarantee that extra accommodations providing for room, single or with bath, can be procured at a slight increase.

Certificates are to be put up in books of 10, 20 and 40 each and are to be accepted by the hotels, rooming houses and apartment houses in Florida between October 15 and December 15, 1927, and March 15 and May 1, 1928.

Generous and hearty response has been given by all of the hotel interests of the State in agreeing to accept these coupons and the State of Florida Travel Bureau has already under contract over 75,000 rooms in hotels, rooming houses and apartments available at this moment. This includes practically every one of the leading hotels and covers nearly every community.

The chambers of commerce and cities of the State are contributing to the financing of the bureau and in addition are offering courtesies and entertainment which will be extended to all purchasers of these accommodations certificates, including sightseeing trips, golf course fees, bathing privileges, admission cards to all institutions of local interest and a great many other attractions. The Publix Theatres have offered free admission to each theatre they own in the State and are spending thousands of dollars in co-operation with the plan.

The entire purpose of the organization and establishment of the State of Florida Travel Bureau is to bring together in co-operative action the railroads, the hotels and the cities of the State in building up a pre-season and a post-season business which will utilize and make valuable any present wasted, unoccupied hotel rooms and any empty seats and berths on railroad trains during the periods which these certificates will be honored.

An attractive official directory will be placed in the hands of every purchaser, explaining the conditions upon which the accommodation certificates are sold and also containing a list of the cities co-operating with the Travel Bureau, listing under each city the names of all hotels that will accept the certificates and a list of the courtesies and entertainment which each city will provide.

The Illinois Central Railway, first of the big Northern railroads to recognize the merits of the extension plan, has offered a rate concession of one and one-half fares for a round trip to Florida from any point served by the system, effective October 15 to December 18. The Southeastern Passenger Association has already granted a similar concession on all Southeastern roads. Efforts are being made to make the concessions nationwide and of greater reduction.

Volunteer Portland Cement Company Building Modern Plant at Knoxville, Tennessee.

ILLUSTRATING THE SOUND ADVANCES IN PORTLAND CEMENT MANUFACTURE AND THEIR SIGNIFICANCE TO THAT SECTION OF THE SOUTH.

By J. S. GRASTY, Ph. D., Sc. D., Geological Engineer, Charlottesville, Va.

There is no industry more closely allied to the development of the locality in which it is situated than a cement plant; and hence the construction of a Portland cement plant, such as that now building at Knoxville, becomes a matter of general interest not only in itself but by reason of its potentialities as related to many other things. It represents not only an important industry but also a very large outlay of capital.

To the railroads affording such a plant shipping facilities, it yields large revenue. For the funds invested, it is probably unequalled with respect to the large quantity of freight produced. Such a plant, therefore, represents much indeed to all the ramifying interests of any community and is helpful alike to both labor and capital because it affords employment on the one hand and with its output inaugurates new construction, buys various supplies and by reason of its earnings adds accordingly to the money resources in the district in which it is situated.

Concretely, what the location of the plant of the Volunteer Portland Cement Company means to Knoxville may then be expressed in tonnage. These tonnages, moreover, represent quantities of material the handling of which will originate

implies, about 600,000 tons of limestone, shale, coal, gypsum and cement annually, but not including other quantities of material used in supplying the company with electric power, etc.

From a shipping point of view, the inbound and outbound freight at the company's plant will total an average of a full train load of 20-odd cars each working day in the year.

Finally, there will be expended each year in this district, before the investors in this enterprise begin to enjoy dividends, a total of approximately \$1,250,000. Therefore, it is not at all difficult to visualize the stimulating effect of this large sum of new money pouring in, as it will, regularly—upon the general business of this community, which may well congratulate itself most heartily upon having so large an undertaking in its midst. The whole district may indeed be considered the debtor to those local men who have brought this result about.

A Portland cement plant is a visible evidence of confidence in the future and general growth of the district it serves. Indeed, comparison of the cement plants of the South today with those operating a decade ago may well give as exact a census of that section's great growth as can be had by any



VOLUNTEER PORTLAND CEMENT PLANT UNDER CONSTRUCTION.

almost wholly within the Knoxville district—and, in expressing new work never done before in this area, they represent in a true sense the creation of new wealth. Hence this sort of development means, as is obvious, the enrichment of this region.

As regards raw material, this item, before any added manufacturing unit—for which provision, however, is to be made—be constructed at this plant, will exceed annually 330,000 tons. Coal and gypsum will total, respectively, around 65,000 and 4500 tons; and finished product will exceed 190,000 tons each year. In round numbers, therefore, the new Knoxville plant will, as the operation starts, begin shipping and continue to move, incident to its activity as a large manufacturing enterprise, with all the expenditure of money that that

other industrial index, for, admittedly, such plants denote progress, building, roads, public and private improvements, increasing wealth, etc.

So, therefore, we see in this sort of development why the South today is—as it increasingly becomes more and more so each year—such a land of opportunity, which recalls that “the development of the South means the enrichment of the nation,” a slogan so long and appropriately carried for many years in the past on the cover of the MANUFACTURERS RECORD.

The Knoxville district—by reason of its population, industries and substantial development, and as a center of expanding water power development with which goes, as is well known, the use of cement in large quantities—has long been regarded with high favor as a locus for a Portland cement

cement formula. These demonstrations have placed it fairly up to the cement manufacturers to improve their methods so as to turn out regularly a superior grade of Portland cement at moderate manufacturing cost.

"As a general formula this means that the composition delivered to the kilns shall always closely approach the theoretical chemical formula and shall be very finely ground. The finished product will then necessarily be close to the theoretical formula, and the cement must be finely ground. The mixing facilities for the continuous accurate blending of the raw material must be accurate and extensive, and the grinding machinery must be the best."

It will be noted that the specifications laid down by Major Lewis in the above statement are rigid and exact. Nevertheless, the ideas so expressed will be embodied in the new plant at Knoxville. The company's engineers plan to follow the best recent successful practice in producing Portland cement of such quality that it will command a wide market in all directions except as restricted by the distances which freight rates would impose.

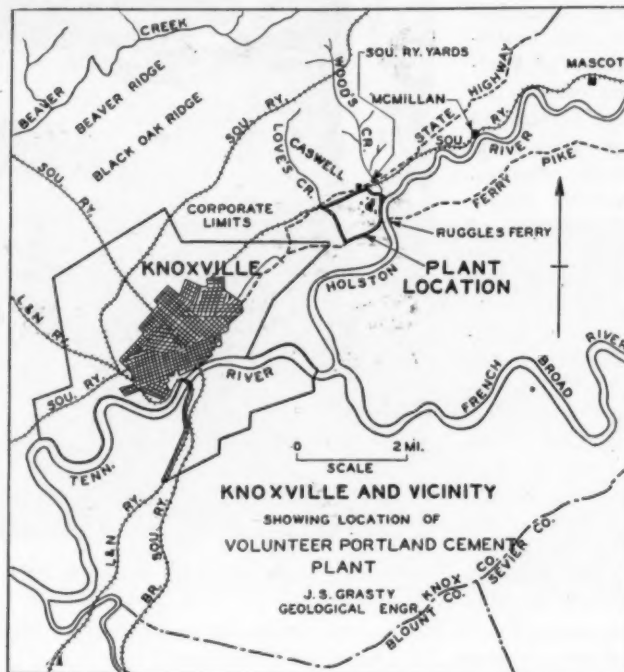
The Volunteer plant enjoys the unique advantage of both rail and water transportation. It is also as favorably located with reference to local market, water supply and raw materials as could be desired. The distance of this plant from the center of Knoxville is about five miles and it is on the Holston River.

The fact that the plant is located on a property of 400 acres, underlaid by limestone and shale, which is also adjacent to the large John Sevier terminal yard of the Southern Railway, assures it an ample supply of cars and quick service. Also large shops of the Southern system are in this district, and by reason of the constant repair work on cars and Knoxville being the center of important freight movement, it is claimed that there is always available a large surplus of leak-proof box cars. Furthermore, the Volunteer plant is within the switching limits of Knoxville and, consequently, it will enjoy through this switching advantage over the Southern Railway also the transportation facilities afforded by the Louisville and Nashville Railroad. Good roads also afford transportation to and from the plant by motor trucks.

The property is bounded on the east for a mile by the Holston River and, in addition to this water supply, there are two perennial streams, tributary to the Holston, which cross it. The site of the plant is a gently rising hillside, well drained and above any possible rise of the river; and full advantage is taken of the slope of the terrain to promote the transporting of materials, and to reduce construction expense as well as to insure adequate drainage at all points.

The road from the Patillo house to the Weeden house follows approximately the crest of the Patillo-Weeden Ridge and marks the general alignment of a sandy, limestone con-

glomerate that underlies the area occupied by shale paralleling it immediately to the south. To the north of this road occurs the Holston marble which is succeeded below and to the north by the Chickamauga limestone. The same limestone emerges on Bound's Ridge to the south, where it is in contact on the north again with the Holston marble. The



THE PLANT IS LOCATED ABOUT FIVE MILES FROM THE CENTER OF THE CITY.

Holston marble thus has been folded into a steep syncline, or trough; the area between, broadly speaking, being occupied by shale, disturbed here and there by structural dislocation. In other words, then, location is afforded for quarries, both on the north side of the Patillo-Weeden Ridge and likewise on the north side of the Bound's Ridge, the two ridges being, as stated previously, approximately parallel in a general easterly and westerly direction.

The track from the quarry to the crusher passes through a gap, or saddle, of the Patillo-Weeden Ridge which is about 200 feet east of the Weeden house; this same track, traveling southward, passes over the shale area and finally reaches the Holston marble to the east of the Evans quarry. Consequently, the track just mentioned will serve both the limestone quarries and the shale quarry to be opened at some



PATILLO-WEEDEN HILL, SHOWING SHALE AREA EXTENDING FROM FLAT LAND TO CREST OF RIDGE.

point to be determined, but probably to the southward of the Weeden house. That is to say, all the raw materials for the manufacture of Portland cement are to be brought in over this same track; whereas, generally speaking, this sort of favorable juxtaposition of raw materials is rather infrequently enjoyed.

The argillaceous (clayey) and calcareous ("limy") rock occurring within the limits of the property owned by the company are all of Silurian Age. Listed in the order of relative age, that is from youngest to oldest, we have the following:

Sevier Shale, consisting of calcareous and sandy shale with thin beds of calcareous material (limestone and marble) near the base of the formation; thickness in this general area in normal section being 700 feet, more or less.

Tellico Sandstone, consisting of sandy shale and blue and gray calcareous sandstone. Thickness 100 to 350 feet.

Holston Marble. This is a crystalline member of the Chickamauga Limestone. It ranges in color from red, brown and gray to white. Thickness 200 to 400 feet.

Chickamauga Limestone. This is a thick limestone ranging in color from dove to blue and gray and in composition from limestone very low in argillaceous content, to limestone dominantly argillaceous. Thickness 500 to 700 feet.

The thicknesses as given above represent the range in thickness of these formations, as observed, to the northeast of this property. On this particular property, however, the full stratigraphic thickness of the Sevier shale is very considerably less than 700 feet; although by reason of the manner of folding an equivalent of that thickness is attained and the supply of this shale is therefore abundant. Likewise the Tellico Sandstone is not represented in its full thickness though found in large quantities to the south of Bound's Ridge. However, its position in the geologic section may



HOLSTON MARBLE AS EXPOSED ON BOUNDS RIDGE.

be considered as represented in the Patillo-Weeden Ridge by a sandy limestone conglomerate which at this point is approximately 30 feet in thickness. On the other hand, both the Holston Marble and the Chickamauga Limestone, which differ but slightly in chemical composition at their points of contact, and so can be quarried together, attain their usual average thickness within the limits of the company's property and, as we have seen, they are dupli-

cated by folding. The calcareous and argillaceous material as described above occur on this property and traverse it in a direction approximately N. 60 to 70 E. in such vast quantity that, in an operating sense, they may be relied upon to last indefinitely. Both the limestone and shale are favorably situated as regards topography for operation to excellent advantage—and, as to composition, the former is much more uniform than the latter. The limestones in Patillo Ridge rise over 90 feet above water level; whereas, those on Bound's Ridge are more than 120 feet above water level. In both cases the dip is southeastward, making an angle of 55 to 60° with the horizontal. The shale area between occupies an intermediate height which rises topographically along its strike to the westward; hence from the viewpoint of extracting both these raw materials, it is obvious that they are most favorably situated.

Analyses made on samples representing the various formations above described, of which the following are a few, are presented below.

DESCRIPTION OF SAMPLES.

Sample 1, 119,702—Volunteer Portland Cement Company's property. Analysis on sample of Chickamauga limestone topographically above and adjoining south marble area, Bounds Ridge, forty stratigraphic feet (plus.)



BOUND'S RIDGE AND HOLSTON RIVER AS SEEN FROM THE SHALE AREA ON SOUTH SIDE OF PATILLO-WEEDEN RIDGE.

Sample 2, 119,703—Representing forty (40) stratigraphic feet of pink marble topographically below Chickamauga limestone, Bounds Ridge; Volunteer Portland Cement Company's property.

Sample 3, 119,704—Shale, extending from apple tree south of Weeden house to bottom of hollow; representative of shale lying between the two marble areas.

Sample 4, 119,705—Patillo-Weeden Ridge; representing 30 feet (plus) of knobby, arenaceous limestone conglomerate, stratigraphically and, at this point, topographically above pink marble.

Sample 5, 119,706—Representing 200 feet of outcrop across strike, pink marble of Patillo-Weeden Ridge; Volunteer Portland Cement Company's property.

Sample 6, 119,709—Representing 20 feet in thickness of residual clay overlying Chickamauga limestone and from cut being excavated for railroad near plant site; Volunteer Portland Cement Company's property.

CERTIFICATE OF ANALYSIS.

No. 119, 702-7: Samples of Limestone Shale and Clay from J. S. Grasty, letter of July 16, 1927.

| Sample | 1 | 2 | 3 | 4 | 5 | 6 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|
| Silica | 6.08 | 3.73 | 65.47 | 27.16 | 2.80 | 60.44 |
| Al ₂ O ₃ | 2.13 | 1.92 | 16.34 | 6.19 | 3.24 | 17.57 |
| Fe ₂ O ₃ | 1.44 | 0.88 | 7.04 | 2.40 | 0.96 | 8.56 |
| CaO | 48.61 | 50.54 | 0.21 | 34.13 | 50.27 | 0.03 |
| MgO | 0.37 | 0.33 | 0.04 | Trace | 0.36 | 0.06 |
| Loss on ignition | 40.72 | 42.18 | 8.91 | 29.17 | 41.64 | 12.70 |
| Manganese oxide | 0.04 | | | | | |

Analysts, PENNIMAN & BROWNE, Chemists, Baltimore, Md.

If in the mix of raw material we use limestone No. 2—above—and shale No. 3, the resulting cement will, as worked out by Major Lewis, analyze as follows:

| | Per cent |
|--------------------------------------|----------|
| SiO ₂ | 20.50 |
| Al ₂ O ₃ | 6.40 |
| Fe ₂ O ₃ | 2.90 |
| CaO | 67.00 |
| MgO | 0.50 |

It is planned, however, to add more siliceous material



EVANS QUARRY.

Showing blocks of stone produced incident to its former operation as a marble quarry.

either in the form of sandstone which occurs within the limits of the company's property or limestone No. 4 may be employed as a partial corrective for high lime content of the cement.

Trenches have been opened at right angles to the strike of the marble, limestone and shale formations. The purpose is to expose and then in suitable divisions to provide samples across the entire width of the formations so that the structural relations of the formations may be worked out in greater detail.

Recent analysis of marble, limestone and shale have given results as tabulated below. From 20 consecutive analyses of marble the average results are as follows:

| | Per cent |
|--------------------------------------|----------|
| SiO ₂ | 0.4 |
| Al ₂ O ₃ | 0.35 |
| Fe ₂ O ₃ | 0.19 |
| CaO | 55.056 |
| MgO | Trace |
| V. M. | 42.865 |

These samples number 1-B, 1-C, 1-D and the rest were on line A from 39 to 44 and from 66 to 77.

Since limestone can contain only 56 per cent calcium oxide, no further comment need be made as to the high degree of

purity of this limestone. For cement manufacture, it would be better if it were not so very high grade from a lime manufacturing point of view, yet it may be used to advantage, when siliceous (sandy) and argillaceous rock—both occurring in abundant quantity, are added to compose the "mix."

Seventy-two consecutive analyses of shale gave average results as follows:

| | Per cent |
|--------------------------------------|----------|
| SiO ₂ | 58.9 |
| Al ₂ O ₃ | 20.4 |
| Fe ₂ O ₃ | 9.4 |
| CaO | 0.3 |
| MgO | 1.9 |
| V. M. | 7.9 |

These shale samples were numbered 16-A to 34-A; 2B to 24B; 20 to 22C, and 2D to 14D. Commenting on the fore-



KNOBBLY CONGLOMERATE AT CREST OF RIDGE.

going, Major Lewis says: "I find it entirely practical to make an excellent cement from shale and limestone of compositions stated above. Analysis of the cement as shipped from the works would be about as follows":

| | Per cent |
|--------------------------------------|----------|
| SiO ₂ | 20.00 |
| Al ₂ O ₃ | 7.25 |
| Fe ₂ O ₃ | 3.40 |
| CaO | 65.00 |
| MgO | 0.60 |

The present writer agrees with Major Lewis, who, when commenting on this analysis, says: "I think, however, the addition of some free silica to the rock and shale would be an improvement." However, the constituents needed for this purpose are on the property and can be added.

The raw materials—limestone, marble, sandstone and shale—have been examined and their suitability to manufacture a high grade of cement has been passed upon favorably by no less an authority than Edwin C. Eckel, mining and economic geologist, author of "Cements, Limes and Plasters," and widely known as a specialist on matters relating to Portland and other types of cement. All these materials are easy of access from the plant; any desired combination can be had both cheaply and accurately but, as has been emphasized in this article, a suitable plant to meet present day demands to produce a Portland cement which will develop strength and hardness quickly is equally important; and the Volunteer Company has such a plant in process of construction which will employ the raw materials as described above.

The plant will employ the wet process of manufacture and will be electrified throughout with power furnished by the Knoxville Power and Light Company through a well equipped sub-station located on the property; the management expects to use local labor, products and supply materials to the greatest possible extent.

Machinery and other contracts were awarded as follows: One 36-inch Superior gyratory crusher—Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

Diesel drag line and electric shovel—The Bucyrus Company, South Milwaukee, Wis.

Two 175-foot concrete kiln stacks, one 12-inch bin stock house, slurry basins and 4-story bag and packing house—Burrell Engineering and Construction Company, Chicago.

First section of railroad siding, plant tracks, excavation for pack and stock houses and roadway into plant site—Dempster Construction Company, Knoxville, Tenn.

Water pump—Dravo-Doyle Company, Philadelphia.

Ten steel quarry cars—Easton Car and Construction Company, Easton, Pa.

Conveying system—The Fuller Company, Catasauqua, Pa.

Coal drying, pulverizing and transport equipment—Fuller-Lehigh Company, Fullerton, Pa.

Motor switches, transformers, etc.—General Electric Company, Schenectady, N. Y.

Four thousand cubic yards of gravel and 2000 cubic yards of sand—Knoxville Sandgravel Material Company, Knoxville, Tenn.

Three buildings—Ingalls Iron Works, Inc., Birmingham, Ala.

Air compressors—Ingersoll-Rand Company, New York.

Garage, laboratory building, shop piers, clinker storage, concrete for buildings—A. R. McMurray Contracting Company, Louisville.

Building and machinery foundations—McMurray Construction Company, Knoxville, Tenn.

Two hammer mills and feeds—Pennsylvania Crusher Company, Philadelphia.

Four Unidan mills, machinery and structural steel, parts for 3 correcting basins for slurry, 1 quadruple mix basin for slurry, and one slurry—F. L. Smidth & Co., New York.

Eight poidemeters—Schaeffer Poidemeter Company, Pittsburgh, Pa.

Two rotary coolers—Traylor Engineering and Manufacturing Company, Allentown, Pa.

Machine shop building—Virginia Bridge and Iron Company, Roanoke, Va.

Two 215-foot rotary kilns—Vulcan Iron Works, Wilkes-Barre, Pa.

Locomotive—George D. Whitcomb Company, Rochelle, Ill.

Cars—Southern Equipment Company, Memphis, Tenn.

Well drills—Armstrong Manufacturing Company, Waterloo, Iowa.

Bridge crane—Milwaukee Electric Crane and Manufacturing Company, Milwaukee, Wis.

Dust collecting machinery—Northern Blower Company, Cleveland, Ohio.

Slurry pumps—A. R. Wilfley & Sons, Denver, Col.

Torpedo conveyors, clinker cooler equipment, including inlet hoods, grinding chamber, spraying buckets and cooler bearings, with automatic oil lubricating system—American Miag Corporation, Buffalo, N. Y.

At the present rate of construction, the plant should be completed and producing Portland cement at the rate of 3000 barrels each day early in the first quarter of 1928. The plant was designed by Major Frederick H. Lewis, one of the best and most favorably known cement engineers in America, and an outstanding authority in Portland cement plant construction.

The company is headed by J. Ross Hanahan, president, one of the pioneer Portland cement men of the South. With Major Lewis and others, he was interested in the plant at Leeds, Ala., which they built and, after successful operation, sold to the Atlas company. He is thoroughly familiar with Southern markets and problems and understands that section's financial and industrial needs, particularly as applicable to the territory his company is to serve. In Knoxville Mr. Hanahan will have the active co-operation of J. Howell Davis, as vice-president, who has been prominently connected with important and successful enterprises in that section of Tennessee, of which Knoxville is the industrial center. The secretary and treasurer of the company is E. Earl Evans, formerly treasurer of Commissioners of Public Works (Water Department), and also lately Controller of the City of Charleston, S. C.

Charles F. Lewis, manager of the company, was "raised up," so to speak, in the atmosphere of Portland cement plants. From his early youth his contact with the industry was interrupted only during nine months of each year while taking his degree at the University of Pennsylvania. Then once more the continuity was broken by the World

War, when he rose to the rank of Major of Engineers, attaining the same rank as his distinguished father. After the war, Mr. Lewis resumed his connection with the Standard Portland Cement Company at Leeds, Ala., as superintendent, and when that company was sold to the Atlas company, he remained there as plant manager and later became assistant general superintendent of the Atlas. He resigned in May, 1927, to come to the Volunteer company at Knoxville.

Directors of Virginia Portland Cement Company:

Howell J. Davis, president, East Tennessee Coal Company, Knoxville; director of Bankers Trust Company, Knoxville.

W. M. Fulton, president of the Fulton Company, Knoxville, the largest enterprise of its kind in the United States, manufacturing thermostats for all purposes; director of City National Bank; president, Home Building and Loan Association.

J. Ross Hanahan, president, Carolina Portland Cement Company, Charleston, S. C., largest distributors of cement and building supplies in the South; president of Planters Fertilizer and Phosphate Company, Charleston.

Frederick H. Lewis, consulting and construction engineer, engaged for the past 20 years in cement works, construction and management; member of American Society of Civil Engineers, American Society of Mechanical Engineers, Society of American Military Engineers, and Engineers Club of New York.

John L. Livers, president, Redland Corporation; vice-president, Allied Utilities Corporation; specialist in development of public utilities and water power, Charlottesville, Va.; vice-president, National Bank of Charlottesville, Va.

C. M. Moore, president, Moore Coal Company and Red Ash Coal Company; director of Holston National Bank, Knoxville.

Arthur Pelzer, Montgomery, Ala., interested in manufacturing and industrial enterprises throughout the South; president, Barnett Supply Company; director of First National Bank and First Joint Stock Land Bank; president, Home Guano Company, Dothan, Ala.

The writer wishes to express his appreciation to all the officers of the Volunteer Portland Cement Company for the many courtesies extended and facilities freely afforded him in assembling the data herewith presented. In particular, he wishes to thank John L. Livers, a director, who was the first to bring this highly modern plant to the writer's attention and then invited him, as his guest, to visit it. In assembling the details as to layout, etc., of plant, and in supplementing the writer's own analytical data, Charles F. Lewis, manager of the company, has been especially helpful.

War Department Awards Contract for 25 Planes.

Washington, D. C.—A contract has been awarded by the War Department to the Keystone Aircraft Company of Bristol, Pa., for 25 LB-5A bombardment planes, to be assigned to Langley Field, Va., releasing planes there for allocation to the advanced flying school at Kelly Field, Texas. The new planes are designed to carry 2000 pounds of bombs at a cruising radius of about six hours with an average speed of nearly 100 miles per hour. They will be equipped with two Liberty motors—one on each lower wing—and the fuselage will be designed for a crew of pilot, mechanic, gunner and bomber. Each plane will carry two machine guns in the forward cockpit, two in the rear and a tunnel gun for shooting through the floor.

Architects for \$350,000 University Building.

Oklahoma City, Okla.—Layton, Hicks and Forsyth, architects of this city, have been commissioned by the Board of Regents of Oklahoma City University, R. T. Stuart, chairman, to prepare plans and specifications for a new \$350,000 Fine Arts building. The structure will be 80 by 100 feet, located west of the administration building, and will conform in height, design and other details with the present Fine Arts structure.

Report of Business Men's Commission on Agriculture.

Gradual tariff adjustment, to equalize more nearly the benefits of the protective tariff system as between agriculture and the manufacturing industry; the creation of a Federal farm board, to assist in the stabilization of farm prices and production; a comprehensive land utilization policy, to be administered through an endowed "national agricultural foundation;" a revision of State and local tax systems; strengthening of the rural banking system, and revision of railroad rates on farm products and development of waterway systems are among the chief recommendations of the Business Men's Commission on Agriculture. The Commission rejects legislation of the McNary-Haugen type as injurious to the long-run interests of agriculture, and as setting a dangerous precedent.

The findings and recommendations of the commission, as made public by Charles Nagel, are the result of a year's study of agricultural conditions and trends. The commission was created about a year ago by the National Industrial Conference Board and the Chamber of Commerce of the United States, jointly, but its findings, according to Mr. Nagel, are its own and were arrived at independently of either the Conference Board or the National Chamber.

The following served as members of the Commission: Charles Nagel, chairman, of Nagel & Kirby, St. Louis, Mo.; E. N. Brown, chairman of the board, St. Louis-San Francisco Railway Company; E. M. Herr, president, Westinghouse Electric and Manufacturing Company; J. G. Lonsdale, president, National Bank of Commerce, St. Louis, Mo.; A. F. McKissick, vice-president, Alice Mills, Greenville, S. C.; Clay Miller, of Clay Miller & Co., San Francisco; Arthur R. Rogers, president, Rogers Lumber Company, Minneapolis, Minn.; John Stuart, president, Quaker Oats Company; Alfred Swayne, vice-president, General Motors Corporation; Paul M. Warburg, chairman, International Acceptance Corporation, New York city.

In part, Chairman Nagel's statement on behalf of the Commission, says that evidence is clear that American agriculture has undergone a prolonged and trying readjustment to post-war conditions, and also has been deprived of the energy, experience and knowledge of many thousands of farmers who have lost their resources and have been persuaded or compelled to leave the farm for other occupations. Thus, the land resources of the Nation "have been impaired by neglect and wasteful exploitation under the pressure to which those who remained on the farm have been subjected." So, the aim in agricultural policies "should have in view such improvement in the economic position of the farmer as is consistent with the wisest utilization of our land resources and the development of types of farmers and of rural life which will make not only for greater farm prosperity, but also for the long-time social and political welfare of the nation as a whole."

The Commission proposes the following suggestions:

"(1) That efforts should be made more nearly to equalize, as between agriculture and manufacturing industry, such benefits as the existing protective tariff system can afford to both. The Commission finds it impossible to support any of the legislative proposals of the type presented by the McNary-Haugen bill and others designed to raise the domestic over the world market price by artificially restricting the supply of agricultural products in the home market.

"(2) That a Federal Farm Board, appointed by the President, be established to aid in the stabilization of prices and production in agriculture by advising farmers and farm organizations fully and promptly regarding the planning of production and the marketing of crops. Efforts should be made to organize stabilization corporations to engage in the

buying and selling of farm products for the stabilizing of prices, such organizations to be established through the co-operation of farm organizations, or private business organizations and of the Government acting through the Federal Farm Board, each supplying part of the capital necessary. The Federal Government should at no time hold a controlling interest in such corporations, although it would participate in the management and exercise supervision, such as it exercises over national banks and the Federal Land Banks and the Intermediate Credit System.

"(3) Immediate means of improving the economic position of the farmer must be sought in measures to reduce his costs of production; great emphasis should be placed upon the things the individual farmer himself can do to lower his production costs; a higher yield per man engaged must be sought; much land now in crops should be put in grass or reforested; larger expenditures should be made for relatively cheap materials, as commercial fertilizer, and for improved farm equipment; rotation and diversification of crops are a fundamental necessity.

"(4) Success of farmers in overcoming their own difficulties without outside aid depends mainly upon organized co-operative efforts in reducing production costs and market losses. Co-operation, in the purchase of goods for agricultural production, in securing test seed, in the improvement of livestock, in the utilization of machinery, in harvesting, in the grading, standardizing and processing farm products, in providing cheap credit and developing calamity insurance, holds great promise of giving the farmer advantages similar to those obtained in the manufacturing industry through large scale production and corporate organization. Co-operative selling organizations offer the greatest opportunities in the marketing of perishable commodities.

"(5) A balanced agricultural production, the highest efficiency of the agricultural industry, sustained prosperity of the farmer and the preservation of the Nation's natural resources can be attained only through a carefully planned policy of land utilization. A large reduction of crop acreage in favor of improved pastures, as well as forest land, is desirable. The Commission proposes an independent organization, endowed with adequate funds, to undertake the classification of land resources and the development of a comprehensive plan for land utilization, which might be called the 'National Agricultural Foundation.'

"(6) Earnest and effective co-operation is needed between the organizations of farmers, business men, manufacturers and other occupational groups to exercise watchfulness over local and State governmental expenditures, and to effect needed redistribution of the burden of farm taxes now resting with undue severity upon the farmers.

"(7) The States should, as far as practicable, relinquish the general property tax to the local governing units and obtain such revenue as they need through income, business and excise taxes.

"The machinery of agricultural credit as it exists being seriously defective and susceptible of great improvement, this problem should be energetically attacked. Serious consideration should be given to the desirability of extending branch banking within certain prescribed areas and of serving agricultural credit needs by a system of fewer, but stronger, banking institutions.

"(8) Agriculture can be substantially benefited by readjustments of the railroad rate structure, the extension of waterway systems and other reductions in distribution costs. A different division of rates on through shipments would be of essential benefit to agriculture in Central and Southern States. The Commission urges expedition in putting into effect any reduction of rates on agricultural commodities as were contemplated in the Hoke-Smith Resolution and prove feasible and consistent with it.

"The development of the Mississippi waterway system and the construction of Great Lakes-to-Ocean water route would be of great benefit to producers of grain in the Central Northwest and the Great Plains section and of meat products in the Corn Belt. The prevention of flood disasters in the Mississippi Basin is urgently required and would be of great benefit to large agricultural areas. In view of its national importance the larger share, if not the whole, of the cost should be borne by the Federal Government.

"(9) The Commission strongly urges the extension of

research work in the field of agriculture by the Federal Government, its co-ordination with the research work of States and other agencies and the appropriation of larger funds for such work on part of the Federal Government."

As the Commission sees it, the worst phases of post-war readjustment in agriculture are over, but readjustment to post-war conditions should not be allowed to obscure the larger problem of securing a balanced and stable relationship between agriculture and other industries.

Important Manganese Deposits in Virginia—J. S. Grasty Appointed Chief Geologist of Manganese Producers Association.

Dr. J. S. Grasty, consulting geological engineer of Charlottesville, Va., who has been selected by the American Manganese Producers' Association as chairman of the geological committee, has called attention to the fact that the late Dr. Thomas L. Watson, State geologist—with whom Dr. Grasty was associated for many years as a member of the faculty of the University of Virginia, as a professor in the Department of Geology—thought the manganese occurrences of Virginia were so important that he devoted two large bulletins to their discussion. In this way emphasis was given to manganese in Virginia to an extent not given officially to any other type of mineral occurrence in that State.

At present two large developments are in progress in the Old Dominion, one being conducted by the Hy-Grade Manganese Company of Woodstock, Va.—this has been blocked out in positive, probable and possible ore over a million tons—and the other by the Brown Mountain Mining Company under the direction of D. H. McCloskey of Staunton. The latter company is operating in the Blue Ridge area in what is considered to be a large occurrence of the residual type of deposit. The Hy-Grade company is operating on Oriskany ores of the replacement type.

When it is remembered that many different deposits of manganese are known to occur in Virginia and most of them are described briefly in Dr. Watson's bulletins it will be seen that the manganese industry promises to become one of the more important industries of the State, under the protection of the tariff, which is essential to prevent the dumping on the American market of the Russian and other foreign ores produced by the cheap labor in competition with domestic ores. This tariff amounts to only 16 cents per ton on each ton of steel produced, and when passed on to the consumer is negligible.

Construction of Airways From Atlanta to Greensboro.

Lowest bids for the construction of airways from Atlanta, Ga., to Spartanburg, S. C., and from Spartanburg to Greensboro, N. C., sections of the Atlanta-New York Airway, have been submitted by the Harrison Wright Company of Charlotte, N. C., according to information from F. C. Hensburg, chief engineer, Airways Division, Department of Commerce, Washington. The Southern section of the airway from Atlanta to Spartanburg is approximately 130 miles and will be marked by 18 rotating electric searchlight beacons and one 375 m/m flashing acetylene lantern, five of the beacons to be installed in intermediate landing fields, while the fields themselves will have a boundary lighting system in addition to the rotating searchlight.

The section from Spartanburg to Greensboro, approximately 140 miles, will be marked by 14 rotating electric searchlight beacons and one 375 m/m flashing acetylene lantern, with installations similar to that on the Atlanta-Spartanburg section.

A Texas Invalid Standing on the Dividing Line Between Time and Eternity Visualizes the Future.

Many of our readers will remember the interesting views from time to time expressed through the MANUFACTURERS RECORD by F. Y. Ponder of Wichita Falls, Texas. As an interesting and original thinker, a farmer prior to the illness which has laid him low for many years, Mr. Ponder, whether discussing economic or religious questions, always has something of interest to say. For several years he has been an acute sufferer from tuberculosis. His own efforts, by living in high mountain altitudes and in other ways and by following the orders of his physicians, have failed to stay the progress of the dread disease.

In a letter received by the editor of this paper a few days ago, Mr. Ponder expresses the thought that the end is near at hand and he gives voice to some thoughts as to things of this life and of the life beyond the grave, which we are sure our readers will be glad to read. His weakness has been so extreme that this personal letter, like others he has written to this paper for publication, had to be scrawled on a pad held above his face while lying flat on his back, and with a weakness so great that only a few sentences could be written at a time and the letter carried forward from day to day until finished. This letter we are publishing was never intended for the eyes of anyone, except the editor of this paper, but the thoughts presented by Mr. Ponder are of more than personal interest. Deeply religious as they are, they carry a message of interest to every human being who studies the problems of the life here and the one beyond. In his letter Mr. Ponder said:

"Wichita Falls, Texas, October 21.

"Dear Mr. Edmonds:

"This is to be a medley, to borrow a term, of ideas and I am sending them to you because nobody else will be interested and you may not be, but in all probability I shall shortly be removed from the narrow confines of the five senses, where I can but feebly translate impressions into words, into the realm where other senses will be provided and these present senses intensified and readjusted to that new environment. My eyes will see the universe in all its magnificent proportions. What earth's most powerful telescopes see but dimly, my new eyes will see *as it is*. I will be provided with a new vocabulary and this thing that has been crying inside of me since earliest memory will speak as clearly as 'yes' and 'no.'

"The receiving capacity of my new ears will be infinitely more sensitive than the most delicate radio tubes. Let your imagination continue this thought. Earth's most delightful sensations and life's most ecstatic moments will be intensified and prolonged for all eternity. * * *

"Anesthesia is the beginning of surgery. Previous to that operations on the body were plain butchery. Death is the anesthesia that God uses while He removes all the effects of sin from our bodies and after the resurrection, aroused from Death's anesthesia, we shall be removed to an environment where there will be no germs or anything that might produce corruption. I will be haunted by no T. B. dreams there. By taking the sting out of Death, Jesus turned Satan's most powerful destructive weapon into an instrument of mercy. What Satan intended to be an end was but a beginning. Amplify ad Infinitum.

"* * * What next?

"You said, 'No man knows whether our civilization shall fail.' Well, it will if human wisdom and morals are all that control. All the ages of past have not altogether been menaced by the potential means of destruction that are all about us and a part of our lives today. What appears to be a progression may be the most dangerous sort of retrogression. The printing press turns out a library of lies for every chapter of truth. In 1915 the Willard-Johnson fight could not be staged in the United States; now the Dempsey-Tunney fight is being staged in every 'picture' town in the United States. How come? Well, mainly because God's folks have laid down. So long as preachers fail to condemn such stuff, in positive terms, that is how long we will continue toward destruction. I wish my calm, deliberate judgment would take counsel from my

hopes, but it refuses to do so. The devil is running the whole show. How long God will allow it nobody knows; but, maybe, the time is shorter than we think. Everything will work out right in the end, I know, but the awful calamity that must come before we reach our limit in sin and ignorance. Both are about the same thing. We don't know how to use what is intrusted to us. Every good thing you can think of has been prostituted to the service of the devil. We seem to have forgotten there is such a fellow and that he bought out man's rights in this world in Eden and Jesus bought them back—for the elect—at Calvary. That, or these, were plain business transactions, but a lot of milksops call it theology and try to ignore it in their search for God.

"Where is the great central generating plant that furnishes the power that operates the universe? How is the power transmitted? Possibly Dr. Milliken's cosmic rays are part of that secret. Mystery? Not more than that power than transforms my invisible thoughts into written words and you over on the other side of the continent know what I am thinking as I lay helpless in bed, so God sends His power and thought to us. Maybe, itself is power, indeed, it is *the power*. Thought is the power that operates this human organism and causes it to operate on generations yet unborn, except in the thoughts of God. He knows our thoughts before they come into our minds. Some of us have an A. P. service and a few exalted beings have a private wire and listen all the time.

"* * * What is man worth?

"The soap maker wouldn't pay over a dollar. For transportation purposes, a burro will bring more, except for very short distances, and then he must be required to use reason which the burro does not have. If he is moderately educated, so that he can use a trowel in building a wall, he is worth \$12 a day for the rest of his life. If endowed with wisdom and adds the right sort of knowledge, he might bring \$100,000 a year for a long term, and with foresight added to these he might be worth a billion—some day. Whatever his value as measured by earth standards, it is the merest trifle compared with the value God puts upon him, and He can't be wrong. Galatians 2: 20: '* * * and the life which I now live in the flesh, I live by the faith of the son of God, who loved me, and gave—exchanged, swapped himself for me.' If I was not worth the price, the Father and Son made a bad trade. Our value to Him, and ourselves, here and hereafter, was the chief motive.

"So far back as memory goes, I have been a mystery to myself, and the longer I live the more mysterious I seem. That means but little over 45 years. When I have lived with God a million years, I shall hardly know the A. B. C.'s in His eternal curriculum and there will be no graduates. * * *

"I want to say much more, but I can't—hateful word! There are many things to be righted, but will not be until the millennium. Before the curtain falls, the forces of righteousness will rise in all their might and whip the devil's forces to a cold standstill. Then he will be chained and right will rule.

"When all the effects of sin are wiped out of this world, who would ask for a better place for heaven?

"I John saw the New Jerusalem coming down out of heaven. Where to? Where else but to earth?

"I will never be able to amplify my thoughts. The only consolation that I have as the end approaches is that I have done my heart's best.

"God bless you.

"F. Y. PONDER."

\$23,000,000 in Houston Building Permits.

[Telegram to Manufacturers Record.]

Houston, Texas, November 8.

October building permits city of Houston \$2,330,019. Houston metropolitan district \$2,711,919. Year to November 1 city of Houston \$23,188,386. Metropolitan district \$28,867,533.

CHAMBER OF COMMERCE.

Utilities Company Improvements at Cumberland.

Cumberland, Ky.—According to an announcement by the Kentucky Utilities Company, Louisville, new construction and extensions have been planned for this vicinity. The proposed work will include 18 miles of 11,000-volt transmission line from London to Manchester and 7.5 miles of 33,000-volt line from Louellen to Cumberland. A 200-kva transformer station will also be built here.

The Farm Relief Problem.

The A. P. Brantley Company.

Blackshear, Ga., November 3.

Editor Manufacturers Record:

Congress will soon be in session and the problem of farm relief will come to the fore. In this connection, I wish to quote from Mr. Melvin A. Traylor of Chicago, until recently president of the American Bankers Association, in an address at the Thirty-sixth annual convention of the Georgia Bankers Association in Atlanta. The following was a special telegram to the Journal of Commerce:

"Atlanta, May 17.—The United States can look forward to a continuance of prosperity for years to come, declared Melvin A. Traylor, of Chicago, president of the American Bankers' Association, in an address to the Georgia Bankers' Association here.

"He expressed confidence in the business situation to continue satisfactory during the balance of the year, without necessarily in every line equaling or surpassing the record of last year. He said the farmers' problems can be cured through balanced production and the application of sound credit policies on the part of bankers to the growers as they apply to other lines of business. He favored regulation of agricultural products by commissions similar to those governing railroads, declaring that farm prices cannot be regulated unless production also is regulated.

"'Production must be regulated to fit consumption,' he said. 'Railroad operations are supervised by Federal and State commissions and their rates are regulated so as to provide adequate financial support and also to prevent undue burdens on the public. Something on the same line can be worked out in agriculture. Basic prices on agricultural products can be regulated, but not until there is some restriction of production.

"'Bankers are in a large measure responsible for many of the mistakes of the farmers, by encouraging the unsound practice in agriculture and in failure to work out remedies for the ills that now beset the farmer in practically every section of the country. No banker would lend money to a commercial or industrial concern unless he were certain that the enterprise was on a paying basis. How many bankers make their agricultural loans on a similar showing?' He said agricultural conditions have caused the failure of more banks the last three years than in the previous 25 years, which, he said, is sufficient to emphasize to bankers the importance of stabilizing this fundamental industry in the United State."

Mr. Traylor's views coincide with mine as expressed in a communication to the MANUFACTURERS RECORD in December, 1926.

It is certainly to be hoped that some method of controlling production that will be constitutional can be devised. The importance of this to the 28,000,000 farmers of the United States is absolutely vital, if they are not to "settle back into a form of peasantry." I am now quoting from Silas H. Strawn, president of Montgomery Ward & Company, in an address recently before the Chamber of Commerce in Washington. Discussing the situation in agriculture, Mr. Strawn visioned two prospects: "Either the farmer will organize to control food production or he will find organization hopeless and settle back into a form of peasantry." Either alternative, according to Mr. Strawn, will be a national calamity.

The South owes a debt of gratitude to the boll weevil for reducing the crop of cotton this year to the extent of 4,000,000 to 5,000,000 bales. Without the aid of the boll weevil, there would have been such a surplus of cotton that the price of this commodity would have sunk to new low levels, with resulting disaster to practically everyone in the South, and the strange part of it is that the boll weevil took a very fair toll of the cotton crop in all States and in nearly all sections of all States. In this section of Georgia, the boll weevil took a total of from 40 to 50 per cent.

The boll weevil accomplished what no human agency, I believe, has ever accomplished and for which the South should be, and probably is, duly thankful.

A. P. BRANTLEY.

President Donaghey of the Farmers Relief Club Discusses the Relation of Bankers and Agriculture.

Arkansas Farm Relief Club.

Little Rock, Ark., November 5.

Editor Manufacturers Record:

Being one of the committee who accompanied Senator Caraway to Houston, Texas, October 24, when a request was made of the American Bankers Association, in session at that time, for a discussion of the Federal farm-aid question, and also being president of a bank, a member in good standing of the A. B. A., I believe I have a right to be heard.

In the first place, I do not believe President Traylor and other leaders of the A. B. A., who oppose Federal aid, as quoted in the *MANUFACTURERS RECORD* last week, have expressed the sentiment of the rank and file of bankers in the South, Middle West and West. That they do express the sentiment of the large bankers of the East, I have no doubt.

I shall not discuss the Federal-aid question any more than to say that the sentiment for Government aid to agriculture, in my opinion, is growing in the South and West, and it is inconceivable that bankers in these agricultural sections could look with disfavor on Federal aid.

Many other bankers attending the convention at Houston expressed themselves, but they were not reported in the news stories. For instance, in a party of 10 bankers, of which I was a member, in a casual meeting, four of them were for the principles of the McNary-Haugen bill, three others were for it, but wanted it modified and the equalization fee eliminated; one wanted to repeal all tariff laws and withdraw all kinds of aid extended to banks, railroads, utilities and others and thereby place all industries on an equal footing. The other two opposed Federal aid of any sort. This incident is merely to show that bankers as a unit are not opposed to Federal aid for agriculture, and to show that it is likely that a majority of those in agricultural sections, who depend upon agricultural profits for their profits, are favorable even to the McNary-Haugen bill.

But why should even those bankers who oppose Federal aid want to stifle discussion of the question? I cannot understand it. The prosperity of this country and the stability of our banks in every section depend upon agriculture. Why should some of those banker-talkers try to cloud the issue by saying agricultural conditions are so much improved? and why did one lawyer-banker-speaker at a banquet say that the agricultural sections had regained 94 per cent (quoting another Jardine report) of their pre-war prosperity?—when we know as a matter of fact that the deflation in the value of farm lands and farm products since 1920 is between 30 and 40 billion dollars, and when we know that Federal Land banks and Joint Stock Land banks are quoting appraised values of land that were worth from \$50 to \$75 an acre and so appraised before the war, now at \$23 an acre.

No; it begins to look like the large bankers of the East, who for some reason or other have always opposed Federal aid for agriculture, were afraid of a discussion of the question at the Association for fear the bankers who favor Federal aid might have stampeded the convention and forced a resolution in favor of it. But no vote was taken—not even any discussion of the question on the floor of the convention was had. Then how can anyone say that all members or even a majority were against farm aid?

Those who reported such great agricultural advance and profits are certainly not acquainted with conditions in the 10 cotton-growing States. Here the floods and boll weevils have reduced what might have been another 19,000,000-bale crop to, in my opinion, less than 12,000,000 bales. This means

that some cotton growers have produced nothing and are utterly impoverished. Some few have made an average crop and are fairly prosperous; others have made a half crop or less. But there is no real prosperity; land values have not advanced, but are continually declining in value. The few dollars more the producers will get for a fewer bale crop will not pay more than one-third of the \$600,000,000 loss of 1926; so, how can these bankers, unless they are ignorant, be honest when they say that 94 per cent of pre-war prosperity has returned to the agricultural industry?

The Farm-Aid Committee of which I was a member, who went to Houston to request the bankers to listen to our plan for Federal aid and endorse it, or condemn it, and suggest some other plan, Federal aid or otherwise, to restore agriculture to its proper place in American industry, were not alarmists or anarchists, and none of them sought political advancement. They were there with a sincere purpose to give aid to a sick agriculture and they were men who had studied the question and become convinced that this country can have no stable, permanent prosperity as long as the agricultural interests are impoverished and as long as laborers in agricultural lines are underpaid. And they went there with a sincere conviction that the bankers who are charged with the financial well-being of this country ought to suggest some plan of their own, or accept somebody else's plan to bring relief to the agricultural industry.

It is a new thing that bankers, who are supposed to study and understand economic questions, sidestep an economic question of such magnitude as that of the economical condition of agriculture and flatly refuse to even hear the question discussed.

I do not believe that either sophistry or subterfuge will meet the issue and those bankers who "duck" the question now will have either to suggest some plan of agricultural relief, themselves, or to accept what others who have given thought to the question have suggested.

GEORGE W. DONAGHEY.

To Erect Paper Bag Plant.

Construction will begin in the near future on the first unit of a wood pulp and paper bag plant at Glenburnie, Anne Arundel county, Maryland, five miles from Baltimore. A tract of 38 acres has been acquired on the Washington, Baltimore and Annapolis Railway. The Maryland Paper Mills, Incorporated, has been organized with an authorized capital of \$2,000,000, and the board of directors includes: William W. Ormsbee and Robert D. Burbank, Washington; George O. Selby and Robert A. Wilson, Baltimore, and Frank S. Revell, Glenburnie.

Initially the company will manufacture paper bags, purchasing the necessary raw materials, and a fireproof building 50 by 200 feet will house the machinery. Later a wood pulp unit will be added.

Investment Trust Corporation Selects Officers.

The following officers have been selected for the new Investment Trust Corporation of Maryland, which has incorporated in Baltimore with an authorized capital stock of \$10,000,000: Howard W. Jackson, president; R. Walter Graham, vice-president, and Howard Tebbs, secretary. Operations of the company will cover the handling of securities, mortgages, credits and other activities, although it is explained that it will not operate as a trust company or carry on a banking business. Its authorized capital stock will embrace 50,000 shares of preferred stock with a par value of \$100; 75,000 shares of class A common stock with a par value of \$50, and 25,000 shares of class B common stock without par value.

Perils of Prosperity and Problems of Progress.

By DR. HENRY MACE PAYNE, Consulting Engineer, the American Mining Congress.

At the outset, let us recall that the nation possessing the greatest wealth of natural resources will be the target of the combined forces of envy and jealousy, and the more successful and prosperous a people become, the greater will be the malice and hatred of those less fortunate. We see about us on every hand the evidences of our industrial supremacy. As a result of intelligent power development, intelligent direction and mass production, our workmen receive the highest wages in the world and enjoy a higher standard of living than ever before. Yet, in the face of this prosperity, we hear throughout the length and breadth of the land the clamoring of socialists and parlor Bolsheviks for the rending of our social fabric and an equalization of wages and opportunity. Not content with soapbox oratory, we find insidious propaganda instilled in press and pulpit, in school and seminary, until a cross-section of public affairs today is tinged with all the colors of the spectrum, from Bolshevik red and parlor pink to pacifist yellow and disarmament gray.

We see the I. W. W. uprising in Colorado, and its blatant defiance of law and order. In the same paper, we read of frenzied attempts to break down the Restrictive Immigration law, which is the last line of defense between us and the unwashed hordes who seek our shores.

We flaunt a crime bill of \$10,000,000,000 annually in the face of civilization; and in Illinois, out of 20,186 arrests for felony in 1926, only 455 convictions were secured.

These are some of the perils of prosperity. Now, as never before, do we need courageous leadership—that intelligent personal service which carries the rights and privileges, the duties and responsibilities of citizenship into private and public daily life, and shows its interest in school and college, serving on the jury, when called, and participating in primary and in election.

The mere absence of a second major party in any State does not absolve the citizen from an even greater responsibility at the primary. In the last Congressional election, only 22 per cent of the total eligible vote was polled in the United States. If you belong to that remaining 78 per cent, what right have you to criticise anything done by Congress?

The reign of the demagogue is the product of the citizen's apathy.

South America now looms large on our trade horizon as an outlet for our mass production, and its development means greatly expanded facilities at our several Gulf ports. It is our business in the back country surrounding those ports to secure continuity of the process of economic metabolism, whereby raw materials and energy—natural resources, if you will—shall be best transformed into the things and services with which people increasingly satisfy their wants.

Students of economics are unanimous in their conclusion that there must be an infiltration of industry throughout the South. In New England and certain Eastern States, where industrial activity is confined to definite manufacturing centers, we find strenuous efforts being made to restore a proper balance between agriculture and industry, and to readjust the relations between rural and urban population. Happily, in the South, our industrial centers have not attained undue proportions, and our immediate task is so to guide and control the era of expansion upon which we are now entering as to effect a harmonious growth between agri-

culture and industry and a uniform distribution of population. North Carolina, for example, has no large cities, and few small towns without mill or industry, and its farmers have never been more prosperous. Belgium, likewise, for generations, has been famous for its equable distribution of wealth, and its diversity of production. Such an ideal utilization of natural resources, and available power, opens the door to capital and creates a condition of permanent prosperity.

If this hope, then, for Mississippi is to be realized, power must be available in every part of the State; for, should our present and future power be used exclusively at the points of generation, the inevitable result would be industrial congestion, and complex standards of living. All the potentialities of abundant and reliable power would be expended in a few fortunate localities, and the remaining vast area would receive only the comparatively insignificant reflexes from such development. This extension of power is the inescapable assignment of our public utilities companies, for which no other agency offers hope of successful performance. If such a volume of power were to be entrusted to independent units, without sovereign regulatory supervision, or to a politically controlled governmental body, the inevitable result would be segregation of units; agriculture would be deprived of the great hope which now gives it life, and further isolation of our rural districts would result.

If industry is so diffused through the South, agriculture will receive a marvelous stimulus. Increased population will bring markets to the farmers' doors. Transportation and handling charges will be reduced. The farmer will plant diversified crops with assurance of a market for his product. The many "starved" counties in different States will acquire tax values productive of sufficient revenue to make possible needed and desired progress in education, road building and public health service. This is the greatest of our problem of progress. Toward its solution science has again come to our aid. At the present time, 80 per cent of the world's nitrogen production is by improved methods far removed from those requiring hydro-electric power, and Muscle Shoals becomes simply an invaluable source of power to the States of Tennessee, Alabama and Mississippi.

Next greatest in importance is the problem of the Government in business. We find the ramifications of Government today competing in a hundred ways with private enterprises. It raises its capital, by power of taxation, from those with whom it is going into competition, compelling its competing citizens to cover all the deficits of its own incompetent management, and with fictitious cost sheets attempts to justify its constantly enlarging production. Its flight into the realms of shipping has during the past 10 years cost us—the taxpayers—\$3,571,000,000, and is still showing an annual deficit of over \$20,000,000. The Shipping Board itself, during that period, has had 30 members and 11 presidents. Can such a travesty of executive incompetency be imagined in private industry?

As was well said by President Edgerton of the National Association of Manufacturers in his recent annual address:

"The next natural step would be for the Government to take over all public utilities, thereby opening the way to the taking over of all industries.

"Then, the year would be shortened to 10 months, the month to three weeks, the week to five days, the day to six hours, the hour to 50 minutes, and the minute to 40 seconds.

"The next act in the drama would be the proclamation of free love, and then the millenium."

Government has no more right to compete with its private

From an address before the Federated Womens Clubs of Mississippi.

citizens in the building of ships, or the writing of insurance or the manufacture of paint than it has to go into the candy business or the clothing business.

Our third great problem is the tariff, an economic problem, not less important to manufacturers than to farmers, laborers and merchants. A sound tariff is an equalization between a pauper wage abroad and a working wage here. The great powers of Europe have combined in the creation of giant "cartels" to monopolize international trade. If we chose to halt these trusts at the door of the custom-house and require them to pay for the privilege of competition; if we, by a just and scientifically determined tariff, compel the 60 cents a day laborer to equilibrate his product with that of the \$2.50 a day American, then our factories will continue to operate on full time, and American goods, manufactured cheaply in enormous quantities by efficient mass production methods, will find ready sale in a domestic market expanding fully as rapidly as American production.

The fourth problem with which we should concern ourselves is proper consideration of our great transportation systems. Our American railroads, comprising 35 per cent of the world's mileage, haul 60 per cent of the world's business. Problems of motor truck competition on State highways toward whose maintenance the railroads contribute through taxation; attempts at compulsory consolidation through ill-advised legislation—these in turn merit our careful study and earnest consideration.

With continually changing conditions, the tax problem is a perennial one. Our present tax structure is the survival of national growth from adolescence to maturity. Corporate business today is overtaxed as compared with many individual and partnership schedules, which works a hardship on corporate stockholders of limited means. Thus, we have a strange and inconsistent situation in which some 3,000,000 individual stockholders in our corporation are taxed indirectly at the rate of 13½ per cent, due to their corporate instead of their personal entities.

You ladies, no less than men of large affairs, are as directly concerned in such matters as anyone else, and I call them to your attention for the express purpose of securing greater interest on your part in another problem of progress.

To recur to the immigration peril, Dr. Ellsworth Huntington of Yale University has devoted a lifetime to the study of climate and race history. He tells us that a family of six strong, healthy Americans moves into the city—father, mother and four children. In five generations, not one remains. He then discusses race tendencies and education, and assures us that of 1000 American college men and 1000 American college women, in 200 years, there will be 50 descendants; but, of 1000 Sicilian or Montenegrin or Italian men and 1000 similar South European women, in America in the same period, there will be 100,000 descendants. I submit the inevitable conclusion for your consideration. The present law, providing for the admission of some 354,000 immigrants a year, under the quota, nevertheless by exception and surreptitious entry actually admits an average of over 500,000 per year, whose political experiences and traditions are wholly different from our own. These unassimilable thousands beget litters of children, who flock into "Leagues for Industrial Peace," "Fellowship of Christian Orders" and various "Youth Movements." As Colonel Bullock recently related to a large gathering of ladies at Chattanooga, one of their pledges reads:

"In case our country is at war I will not join nor work for the Red Cross, nor make hospital supplies; I will not urge food conservation; I will not buy Liberty bonds nor war loans; I will not make munitions, nor take a man's place to enable him to go to war."

There are today in the United States 47 organizations

seeking to wipe out the white and the blue in our flag and make it entirely red. Fifteen hundred foreign language papers pursue their course unmolested. So, I appeal to you ladies, a significant and active group of the 3,000,000 club women of America, to work as never before for a better knowledge of, and a wider interest in, the Constitution of the United States.

Wherever politics is corrupt, it is because the forces of corruption count upon the indifference of the average citizen. Wherever politics is played as a game, and not as high minded civics, it is because the players find the citizen to be merely an interested onlooker.

This indifference to the science of Government brings with it a sense of indifference to civic obligation. The vote slacker becomes the jury slacker; the man or woman who has no concern for his country's problems soon has no respect for its laws. On every hand, we hear critics of our form of Government, but this Government need fear no ill so great as the indifference of its own citizens.

Rounding Out the Citrus Industry.

W. J. Howey, president of W. J. Howey Company of Howey, Fla., which is developing a vast citrus industry on the basis of ownership of about 60,000 acres of citrus land, of which 12,000 or more acres are already in groves, in the course of a letter to the MANUFACTURERS RECORD says:

"I have always maintained that the citrus business was a business and not a situation, or a job to be deserted with the ring of a gong or the punching of a clock. Some people raise oranges, but don't sell them; some people sell oranges, but don't raise them; some people grow trees, but not fruit; most of them, and practically all of them, do a part of the thing, but no one completes the cycle. Some people, for instance, raise nursery stock, but not trees.

"Now, all of these operations are related and should be brought under one regime, and that is precisely what we are doing, to-wit: Producing our own nursery stock, carefully selecting budwood, transplanting the tree from the nursery into the grove and properly nourishing and cultivating this tree, and the fruit production is carefully built up so as to produce the best possible quality fruit known to science at the moment. Thus, through our packing house we will cull heavily all of the fruit which goes into a box, so that anyone who buys a box of Howey-in-the-Hills fruit will know that they are getting quality to the fullest extent of the word. The fruit which does not go into a box is made up into by-products; with us, it will go into juices.

"In order to maintain an even flow of this distribution, we will open drink stands throughout the country, sufficient in number to cope with any production which is made here. These drink stands will, in themselves, educate and be the means of bringing about the distribution of these juices to the family, in much the same as milk is now distributed by the dairy companies. In this way one may maintain the integrity of his pack. We, ourselves, will sell our fruit in the pack direct to the consumer in half or full boxes, as desired, and set the price at the source the same as a manufactured article."

Borden Southern Company Increases Capital to \$2,000,000.

Recent reports state that the Borden Southern Company of Starkville, Miss., a subsidiary of the Borden Company of New York city, has increased its capital stock from \$300,000 to \$2,000,000. This company erected a factory at Starkville about two years ago for the production of condensed milk and other milk products. With reference to the construction of an addition and improvements, J. P. Kirkup, assistant superintendent of the construction and equipment section of the manufacturing department of the company, writes from New York that no general contract will be awarded.

More Than \$200,000,000 Annually for Industrial Research.

About \$200,000,000 annually is being spent in the United States for industrial research by more than 1000 industrial concerns and by the federal government, with industry spending two dollars for every one spent by the government, according to information collected by the National Industrial Conference Board, New York, incidental to a study of industrial organization.

Industries whose research expenditures were largest five years ago are those which have scored the greatest relative growth since then, according to the data submitted to the Conference Board. Manufacturing companies were found to spend on an average from one to three per cent of the gross amount received from sales on research.

Whereas in former times invention, as the product of individuals generally without means or ability to give practical expression to their dreams, had to wait on chance and capital to become available to the world, modern industry anticipates invention by systematic co-operative research, continuous and planned in accordance with definite objectives. Large as is the amount of money spent for industrial research by industrial corporations, by technical schools, universities and the government, it does not include other large sums spent for research work of great variety done continuously by life insurance companies, privately endowed social, economic and charitable institutions, which are particularly numerous in the United States, or the research work done by state and local governments, nor does it take into account the expenditures of commercial research organizations selling their services to others on a fee basis.

Government's Consolidated Cotton Report Issued November 9.

The cotton crop of the United States is estimated by the Crop Reporting Board of the Department of Agriculture at 12,842,000 bales or 164,000 bales above the October forecast and 5,135,000 bales below the production of 1926. The Bureau of Census cotton report shows 9,925,795 running bales (counting round bales as half bales) ginned from the crop of 1927 prior to November 1, compared with 11,253,873 bales for 1926 and 11,207,197 bales for 1925.

Cotton production in foreign countries, as reported by the Bureau of Agricultural Economics on November 9, was 1,403,000 bales, or 14.8 per cent below the amount produced in the same countries last year. The area planted to cotton in foreign countries reported to November 9 amounted to 25,012,000, or 5.9 per cent below the area planted in the same countries last season.

The estimated world production of cotton for 1926-1927 was 28,000,000 bales, and according to the cotton production estimates so far received, the world crop will be about 5,000,000 bales less this season.

American Construction Council to Meet.

The sixth annual convention of the American Construction Council is to be held at the Hotel Statler, St. Louis, Mo., December 1 to 3. Deliberations will center along the general theme of "Assaying the Construction Industry—Its Needs and What Should Be Done About Them," according to an announcement by Dwight L. Hoopingarner, the council's executive. The council's officers are: President, Franklin R. Roosevelt; vice-presidents, Harry A. Wheeler, president, Union Trust Company, Chicago; R. E. Dougherty, engineering assistant to president, New York Central Railroad; D. Knickerbacker Boyd, architect, Philadelphia; treasurer, Wright D. Goss, chairman, Empire Brick and Supply Com-

pany, New York; Dwight L. Hoopingarner, executive. Regional chairmen for the following Federal Reserve banking districts of the country are: E. J. Russell, St. Louis; Charles T. Main, Boston; N. B. Nelson, Kansas City; William F. Chew, Baltimore; Ellis F. Lawrence, Portland, Ore.; J. H. Ellison, Minneapolis, with Mr. Roosevelt and Mr. Wheeler serving ex-officio for the New York and Chicago districts, respectively.

Contract for \$300,000 Baltimore Church.

General contract has been awarded to the M. A. Long Company, Baltimore, for the erection of the new \$300,000 building at Park Heights and Wylie avenues, Baltimore, for St. Ambrose Catholic Church, of which the Rev. Hugh J. Monaghan is pastor. This structure will be the second of a group of buildings for St. Ambrose parish, a school building having been erected several years ago. It will be of the English Gothic type of architecture, Woodstock granite and limestone trim, to harmonize with the school building. A seating capacity of about 800 will be provided in the nave and about 200 in the chapel. Maginnis & Walsh of Boston, Mass., are the architects.

Cotton Represents Less Than One-Half of Southern Exports.

Last year merchandise in excess of \$1,672,490,000, representing nearly 35 per cent of the country's total, was shipped abroad through Southern ports. Although the South produces practically all the country's cotton and the exports of this staple for years has been a factor in keeping the foreign trade balance in our favor, raw cotton exported from the South represented less than one-half of the South's total of foreign shipments and the value of its cotton and linters exported last year amounted to \$730,807,000, leaving \$941,682,000 as the value of other commodities than cotton for shipment abroad through the South.

For the calendar year 1926 nearly one-half of the corn and over half of the wheat exported by the United States passed through Southern ports practically all the 77,000,000 bushels of rice exported and in addition large quantities of other crude products of the farm.

A Banker's Reasons for Talk About Unemployment.

In their monthly review for November Caldwell & Company, bankers, Nashville, Tennessee, say:

"Here and there small groups of men are being 'laid off.' This has created the impression that a smaller volume of business is being transacted. That is incorrect. It is true that unemployment is increasing, very slightly, but it is not true that the volume of business is dwindling. There is nothing contradictory in the statement. The explanation is that we are progressing. We are becoming more efficient. Nine men today do as much work as ten men did a year ago. Increased efficiency is not occasional but general. Labor saving machinery has made it possible to build a motor car for less money today than a year ago. Scientific studies have eliminated a large part of the hazard of oil producing. The big companies do far less out and out wildcatting than they did a few years ago. Seismographs are used to locate oil pools with surprising accuracy, and consequently with much less cost. Railroads are paying men higher wages and earning larger profits than ever before. Farms are rapidly becoming mechanized. Only about 25 per cent of our population now live on farms yet production is so large that farmers are crying vociferously for help. We have about twice as many coal miners as we need, largely because of improved mining methods. In some lines the advance in modern methods is not so conspicuous as in others but progress is universal. Fewer men are required to do a given amount of work than was the case even a year ago. This is the real reason for the moderate increase in unemployment."

\$5,000,000 St. Louis Municipal Auditorium Plans Approved.

St. Louis, Mo.—Plans for the new \$5,000,000 municipal auditorium to be erected in this city have been approved by the advisory commission, the completed design having been submitted by the Plaza Commission, Inc. In its drawings the Plaza Commission has provided for a structure 322 by 493 feet, to face the New Memorial Plaza and occupy an entire block from 14th to 15th street, and extend south from Market street to Clark avenue, a distance of practically two city blocks. The structure will be 162 feet from the street to the ridge line, while the main arena will be 270 feet from wall to wall, 90 feet from the floor to the ceiling, and spanned by huge trusses, with the use of posts eliminated. Entrance to the arena will be afforded by six large ramps and inclined passageways instead of stairways, making it possible to empty it of capacity crowds of 12,000 people in 10 or 12 minutes. Twenty-three entrances will be provided.

In addition to the main arena, the building will contain a music hall or theater to accommodate 3500, for which nine entrances will be provided. The music hall will be separated from the arena by a stage 142 feet long and 48 feet deep and on either side of the hall smaller halls will be provided to seat 750 each, two of these to be on the 14th street side. They will be provided with separate entrances, stairways, elevators, cloakrooms and restrooms. The music hall and arena are also provided with similar facilities, so that all units may be used at the same time without interference with each other.

The ground floor of the structure will be given over to exhibition space for commercial exhibits, automobile shows and other expositions, for which 94,000 square feet of space on the first floor will be available and 25,000 square feet on the arena floor. Space will also be provided for the press, concert rehearsals, musical library and storage, greenrooms, dressing rooms, paint shops and other facilities. Heat will be obtained from a central plant, the blast system to be used, and air will be washed and purified. The exterior of the building will be faced with Bedford stone in harmony with the monumental character of the design and in conformity with the new municipal courts building and the Soldiers' Memorial.

Members of the Plaza Commission, Inc., include the following architectural firms, all of St. Louis: La Beaume & Klein; Mauran, Russell & Crowell; William B. Ittner, Inc.; Helfensteller, Hirsch & Watson; Klipstein & Hathmann; T. P. Barnett & Co.; Preston J. Bradshaw, and George D. Barnett, together with the engineering firms of Brussel & Viterbo and F. C. Taxis & Co., both St. Louis. E. R. Kinsey, president of the Board of Public Service, and Harland Bartholomew, engineer of the City Plaza Commission, are ex-officio members.

Activities at Linden, Ala.

Trains over the new line of the Frisco Railroad will be in operation from Linden, Ala., to Pensacola and Mobile by March 1, and the Louisville and Nashville will furnish service from those cities to Meridian, Miss., through Linden, by approximately the same date, according to Thad Wray, chairman of the new industries committee of the Linden Chamber of Commerce.

As the seat of Marengo county, Linden is in the heart of the cotton belt, the county ranking high also in cattle raising and dairying. Linden is estimated to have trebled in population since the census of 1920, without the stimulus of a "boom" or particular "boosting," and with the new railroad facilities and its own natural advantages the residents expect to see this growth continued without interruption, states Mr. Wray. The city is well provided with public utilities,

and also with churches and modern schools, while contracts recently have been let for water-works and an up-to-date sewer system. Further, it is said raw materials in abundance are available for such industries as cotton mills, pulp or paper mills, furniture factories, condensed milk and cheese plants and canning plants.

Frisco Orders \$2,000,000 Worth of Rails.

One of the largest orders for new rail has just been placed by the Frisco Lines for 200 track miles of 110-pound rail at a cost of \$2,070,000. The order includes necessary fastenings, frogs, switches and tie plates.

Architect for \$350,000 Salvation Army Building.

Final details for a \$350,000 building at 119 Pennsylvania avenue northwest, Washington, D. C., for the Salvation Army, Inc., with general offices at 607 E street northwest, Staff Capt. Ernest R. Holz, divisional commander, are now being consummated. Clarence L. Harding of Washington is the architect. The new building will replace the Reliance Hotel, which houses a branch of the Army.

Daily Average Crude Oil Production.

The American Petroleum Institute estimates that the daily average gross crude oil production in the United States for the week ended November 5 was 2,453,450 barrels, as compared with 2,466,550 barrels for the preceding week, a decrease of 13,100 barrels. The daily average production in the South was 1,535,150 barrels, as compared with 1,541,650 barrels, a decrease of 6500 barrels.

Large Apartment Building Projected for St. Louis.

St. Louis, Mo.—Interests represented by Edward Wagner of the Willson & Koontz Real Estate Company, and R. H. McRoberts, attorney of this city, are reported planning to erect an 8-story apartment building on Skinker road. The building will be known as The Versailles and is expected to be one of the largest apartments in the city. Plans for the structure are being prepared by Preston J. Bradshaw, St. Louis.

\$30,000,000 Brazos Valley Flood and Reclamation Project.

Outlining plans for the organization of the Bell county unit of a proposed Brazos Valley Flood and Reclamation Project, W. A. Spencer, secretary of the Chamber of Commerce, Temple, Texas, advises that such a project has been discussed and that a local organization has been effected with Col. P. L. Downs, president, and himself as secretary. The project is considered a vital one, the Bell county unit to involve the construction of three dams, it is said, at a cost of about \$8,000,000. The State project is estimated to cost \$30,000,000.

Del-Mar-Va Association to Raise \$100,000.

Salisbury, Md.—An active campaign has been started by a bankers' committee for the five central counties of the Del-Mar-Va Peninsula for raising \$100,000 to refinance for a three-year period the Del-Mar-Va Eastern Shore Association, of which Dr. G. Layton Grier of Milford, Del., is president. William S. Gordy, Jr., of this city is chairman of the committee and former Governor Emerson C. Harrington of Cambridge, Md., is vice-chairman. It is expected to raise \$60,000 of the amount required before December 31. L. W. Gunby, Salisbury, is chairman of the Wicomico county committee, co-operating with the bankers' committee, with I. L. Benja-

min and William B. Tilghman, Jr., both of Salisbury, as vice-chairmen.

The Del-Mar-Va Association proposes to promote the industrial, agricultural, resort and other possibilities of the Del-Mar-Va Peninsula, which includes the three counties of Delaware, nine counties of the Eastern Shore of Maryland and the two counties of the Eastern Shore of Virginia.

For Private Operation of the American Merchant Fleet.

Development of the American merchant marine through private, rather than Governmental, operation was advocated last week by Edward N. Hurley, war-time chief of the United States Shipping Board, who said at Washington that "the financial responsibility involved in the building and operation of an American merchant fleet should be placed in private hands." Mr. Hurley's suggestion takes the following phases:

Congressional appropriation of a revolving merchant marine fund of \$500,000,000 to be loaned at 2½ per cent to private interests for the ships.

Opposition to a Government subsidy on the grounds that subsidies destroy initiative and breed inefficiency.

Recommendation that American railroads participate in the ownership and operation of ships.

Suggestion that American business must have at its disposal an American merchant marine to carry up to 50 per cent of American exports.

Purchase of the war-built fleet of ships now in possession of the Shipping Board by private interests, benefiting from the revolving merchant marine fund.

Enrollment of selected vessels in the United States Naval Reserve, such vessels to serve in time of need.

Adjustment of the Panama Canal toll rates.

Mr. Hurley also quoted President Coolidge in favor of private operation of the American merchant fleet.

Cotton Cloth Production and Sales.

The following statistics by the Association of Cotton Textile Merchants, New York, on the production, sales, etc., of standard cotton cloths cover the month of October, 1927. The figures quoted cover upwards of 300 classifications or constructions of standard cloths and represent a very large part of the total production of these fabrics in the United States.

This report, compiled from 23 groups, represents all of the yardage reported to the Cotton Textile Merchants Association and the Cotton Textile Institute:

| | Oct., 1927 (4 weeks) |
|---------------------------------------|----------------------|
| Production | 331,854,000 yards |
| Sales | 225,560,000 yards |
| Ratio of sales to production..... | 68.0% |
| Shipments | 293,411,000 yards |
| Ratio of shipments to production..... | 88.4% |
| Stocks on hand October 1..... | 218,568,000 yards |
| Stocks on hand October 31..... | 257,011,000 yards |
| Change in stocks..... | 17.6% |
| Unfilled orders October 1..... | 500,298,000 yards |
| Unfilled orders October 31..... | 432,447,000 yards |
| Change in orders..... | 13.6% |

New Type Centrifugal Cast Iron Pipe Machine.

Birmingham, Ala.—Y. A. Dyer of the Southern Metallurgical Company, Cave Springs, Ga., just over the Alabama line, announces a new machine under the Beatty patent for manufacturing centrifugal cast iron soil pipe. It is estimated that the cost of production of pipe will be materially decreased. The new machine is now being tested out.

Steel Boiler Orders.

New orders for 1304 steel boilers were placed in September, as reported to the Department of Commerce by 72 manufacturers, comprising most of the leading firms in the industry, as compared with 1517 boilers in August and 1516 in July.

Gasoline Taxes Increase.

Gasoline taxes yielded a total revenue of \$101,250,841 in the first six months of 1927, according to information collected from the States by the Bureau of Public Roads of the United States Department of Agriculture. This represents an increase of 19.2 per cent over the same period of 1926. A tax was imposed in all but four States and two of these, Illinois and New Jersey, have since adopted a tax, so that only two States, New York and Massachusetts, do not now tax gasoline. The rate of tax on June 30 ranged from two to five cents per gallon and averaged 2.55 cents.

The revenue derived constituted an important item in financing highway programs and was used very largely for that purpose. State highway funds received the largest portion, being credited with \$69,616,088. County and local road funds received \$22,843,566, payments on road bonds amounted to \$4,598,751 and the remainder was used to defray collection costs and for miscellaneous purposes.

The revenue derived indicates that 4,919,000,000 gallons of gasoline were consumed by motor vehicles, including estimated amounts for those States not imposing the tax. This is 11.4 per cent more than was reported for the first six months of 1926, while the increase in motor vehicle registration was only 7 per cent. This seems to indicate an increased use of the motor vehicles.

Gasoline tax collected in the South for the first six months of this year amounted to \$45,741,741, or 45 per cent of the country's total. The total receipts in the South for 1926 were \$80,284,223.

GASOLINE TAX RECEIPTS, BY STATES.

| | Tax rate on June 30 | Revenue derived first six months of 1927 |
|----------------------------|---------------------------|--|
| Alabama | 4 | \$2,653,637 |
| Arizona | 3 | 518,599 |
| Arkansas | 5 | 1,560,559 |
| California | 2 | 9,035,934 |
| Colorado | 3 | 1,194,077 |
| Connecticut | 2 | 1,307,024 |
| Delaware | 3 | 267,091 |
| Florida | 4 | 5,355,217 |
| Georgia | 3½ | 3,071,528 |
| Idaho | 4 | 606,694 |
| Illinois | 3 | 4,564,711 |
| Indiana | 2 | 2,777,183 |
| Iowa | 2 | 1,891,245 |
| Kansas | 2 | 2,472,015 |
| Kentucky | 2 | 1,411,554 |
| Louisiana | 3 | 742,925 |
| Maine | 4 | 1,774,442 |
| Maryland | 4 | 5,033,798 |
| Massachusetts | 2 | 2,274,327 |
| Michigan | 2 | 2,136,296 |
| Minnesota | 2 | 2,921,065 |
| Mississippi | 3 | 428,363 |
| Missouri | 2 | 1,470,064 |
| Montana | 4 | 199,497 |
| Nebraska | 4 | 413,581 |
| Nevada | 4 | 614,200 |
| New Hampshire | 4 | 3,932,544 |
| New Jersey | 4 | 395,933 |
| New Mexico | 3 | 7,539,826 |
| New York | 3 | 3,196,376 |
| North Carolina | 3 | 1,613,209 |
| North Dakota | 2 | 6,101,696 |
| Ohio | 2 | 300,971 |
| Oklahoma | 2 | 2,210,636 |
| Oregon | 3 | 960,630 |
| Pennsylvania | 3 | 1,983,139 |
| Rhode Island | 3 | 5,975,553 |
| South Carolina | 3½ | 567,794 |
| South Dakota | 3 | 275,536 |
| Tennessee | 4½ | 3,122,518 |
| Texas | 2 | 1,631,226 |
| Utah | 3½ | 1,416,057 |
| Vermont | 2 | 2,526,058 |
| Virginia | 3 | 1,256,908 |
| Washington | 2 | 548,605 |
| West Virginia | 2 | |
| Wisconsin | 2 | |
| Wyoming | 2 | |
| District of Columbia | 2 | |

*New 2 cent tax, effective August 1, 1927.
†New 2 cent tax, effective July 1, 1927.

An election has been called for December 5 by the Martin County Commissioners, Stuart, Fla., on 28 improvement items which will involve the issuance of \$1,723,000 bonds if the vote is favorable.

THE IRON AND STEEL SITUATION

Pittsburgh Steel Market.

Pittsburgh, November 14—[Special.]—The whole steel situation has taken a distinctly marked turn for the better in the past week. There is no increase in mill operations or in the volume of orders for current shipment, but the whole showing is better in that a trying period has been passed through with production well sustained and prices suffering but little, while all bad news seems to be out now and whatever changes occur in future should be of a favorable character.

Production of steel in the past four months has made a new record for steadiness. Never before in the whole history of the industry was production so uniform in a four-month period. During this period there was a confusion of reports of steel conditions growing poorer and predictions of decided improvement to occur almost at once. Both classes of statements have been entirely discredited by the course of production, as officially reported monthly. In the four months the average rate of steel ingot production was 127,588 gross tons per working day. The low month was only 1.8 per cent under the average, the high month was only 1.5 per cent above the average, and October was .1 per cent under the average. Steel buying simply persisted despite the very conservative and, indeed, timid attitude of buyers. Timidity was plainly indicated when there were so many rush, double rush and triple rush orders, not a few of them being telegraphed.

A slight decrease in steel production is to be expected, seasonally, for this month and next, but only a big new backset in general trade could prevent substantial increases in demand and production after January 1. The experience of less than a year ago shows how easy such increase can occur, for then as now the style was hand-to-mouth buying. December was the low month of production in 1926 and yet last March, three months later, made a new high record in all time for steel production.

Recent doubts as to whether the 1.75 cent price on bars, shapes and plates would hold has been fully dispelled, as the steel for the first portions of the Fort Lee bridge over the Hudson River at New York city, over 50,000 tons, went on the basis of 1.75 cents, and late last Thursday the Carnegie Steel Company, subsidiary of the United States Steel Corporation, announced that it had established a minimum of 1.80 cents, Pittsburgh, on bars, shapes and plates, with 10 cents per 100 pounds advance on less than carload lots.

While steel buying in general is of routine character, two very large special orders have just been placed for line pipe, aggregating some 170,000 tons, equal to about two-thirds of a month's production of the whole pipe industry at the rate of the past few months. One was the order for 350 miles of 20 and 22 inch pipe for the natural gas line from the Amarillo field, in the Texas Panhandle, to run to Denver, Pueblo and Colorado Springs, about 100,000 tons, the other being an order aggregating about 70,000 tons of oil pipe line, 6-inch, 8-inch and 10-inch, for the Roxana Petroleum Company, to be laid in Texas and Oklahoma.

The New York Central has ordered 177,140 tons of rails, the St. Louis and San Francisco 35,000 tons—from the Ensley, Ala., mill—and the Boston and Maine 10,000 tons. This makes the total in the season's rail buying movement, which began about October 1, approximately 1,000,000 tons, for deliveries over the first half of the new year, with a little rolling provided for this month and next. In September the Louisville and Nashville had placed 66,000 tons with the Ensley mill, for deliveries over the next few months.

The Steel Corporation's unfilled tonnage statement shows an increase in unfilled obligations in October of 192,927 tons, against a decrease of 47,924 tons in September, and small

increases in the two preceding months. The October increase is fully accounted for by rail contracts. Shipments in September and October were at about 68 per cent of capacity.

The Ford Motor Company has as yet placed no real tonnage orders against quantity production of the new car. The orders will come with a rush eventually and will undoubtedly have a far-reaching influence.

Birmingham Iron Market.

Birmingham, Ala., November 14—[Special.]—More pig-iron is being sold under the new, lower base quotation, down to \$16 per ton, No. 2 foundry, than previously, but the anticipated buying movement is not yet reported. Some talk has been heard that one or more blast furnaces will be closed down shortly and the surplus stock of iron ore for such excess in demand as may be felt during the last 60 days of the year. It is believed that on the turn of the new year it will be seen that consumers have more iron on their yards than for a long time.

The reduction of \$1.25 per ton in pig-iron quotations here, from \$17.25 to \$16 for No. 2 foundry, caused much comment in iron circles generally. It was anticipated that there would be some selling into the Ohio River territory, but only a small tonnage has been so far sold into that section.

Survey of the iron melting interests shows that there has been slight improvement in the pressure pipe trade, lettings being a little more numerous and tonnages heavier. The quotations are firmer, also, the base being \$29 to \$30 on six-inch and over sizes and no inclination to give concessions. With the lower cost of pig-iron, followed by a reduction in coke prices, the earnings of the pipe makers will show increase for the last quarter of the year. Many lettings have been received from the far West. The soil pipe trade has been slow and production is being held down some; warehouse stock is still of considerable tonnage.

The steel market will get through the year with an average production, demand for some shapes of steel being good and in other lines quiet. It has been some time since any activity has been seen in the car works. There is a fairly good production at open hearth furnaces in this State. Wire and nail mills have been shipping their products right along, and fabricating shops of this territory have been keeping up a steady operation. The railroads are now placing their orders for 1928 rail. The Frisco placed orders for 200 miles of 110-pound rail and accessories, the order being estimated at \$2,070,000. The Southern Railway is expected to come into the market shortly for its tonnage for next year, while the Louisville and Nashville a few weeks back placed an order for 60,600 tons of rail.

Coal production in Alabama is around 377,000 tons weekly. It is estimated that for the first nine months of the year the total output at mines went to 15,500,000 tons, against 15,750,000 tons for the same period last year. It is hardly believed the last three months of the year will be able to bring the total to that of 1926, when 21,508,812 tons were mined in this State. The United States Bureau of Mines gives Alabama credit for 21,000,962 tons last year, valued at \$48,036,000, and 27,345 men employed in the industry.

Coke production continues steady. Following the course of pig-iron, foundry coke prices have dropped 50 cents a ton, now selling at \$5 per ton. Orders have been coming in fairly well and very few of the by-product ovens are idle, independent producers having very little coke on hand.

The scrap iron and steel trade is still slow, heavy melting

steel, No. 1 cast, and stove plate being the principal items in the scrap list moving. Heavy melting steel hovers around \$10.75 delivered in the home territory. There is no scarcity of scrap in this section and delivery can be made promptly.

Quotations for pig-iron and iron and steel scrap follow:

PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$16.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$16.50; iron of 2.75 to 3.25 per cent silicon, \$17.00; iron of 3.25 to 3.75 per cent silicon, \$17.50; charcoal iron, f. o. b. furnace, \$29.50.

OLD MATERIAL.

| | | |
|---------------------------------|------------|---------|
| Old steel axles | \$16.00 to | \$17.00 |
| Old iron axles | 16.00 to | 17.00 |
| Old steel rails | 12.50 to | 13.50 |
| Heavy melting steel | 10.50 to | 10.75 |
| No. 1 cast | 14.00 to | 15.00 |
| No. 1 railroad wrought | 11.00 to | 12.00 |
| Stove plate | 13.00 to | 14.00 |
| Old car wheels | 12.00 to | 13.00 |
| Old tramcar wheels | 12.50 to | 13.50 |
| Machine-shop turnings | 8.00 to | 9.00 |
| Cast-iron borings | 8.00 to | 9.00 |
| Cast-iron borings (chem.) | 13.00 to | 13.50 |

The Metal Market.

New York, Nov. 14—[Special.]—The trend of the metals last week was the same as the preceding week with copper advancing, zinc and tin groping for new low levels and with lead comparatively steady. Not in many months have two of the major metals gone so sharply in opposite directions as copper and zinc over the past three or four weeks. It certainly speaks well for copper that it is bucking so well the current of lower commodity prices.

During what is regarded as one of the best buying months of the year, sales of the metals during the past week have been poor. In only one department were they extremely brisk and that was in sales of copper for export. It might have been expected that consumers of tin and zinc would have bought freely in view of the bargain prices.

In the case of tin the consumers have lost confidence in the market. Whereas, during the preceding week they often bought 600 tons per day, 250 tons was the limit of daily sales the past week. Consumers of zinc are not purchasing for two reasons—first, because they covered their needs over the balance of the year when the market was around 6 cents per pound, East St. Louis; second, because they expect the bottom of the market will settle around 5½ cents, East St. Louis, and they will not be interested until that figure is reached. As an aftermath of the sharp drop in tin, which is 17 cents per pound lower than the high mark of the year, one of the prominent tin trading houses has met with severe financial embarrassment, having over-extended itself on the long position. Where the difficulties of one house have come to a head, it is probable that several have suffered severely from the same conditions. Tin is the most extremely speculative metal and casualties among those who handle it are naturally high and severe. A series of tin auction sales in 25-ton lots was held on the New York Metal Exchange the latter part of the week to turn into cash the assets held by this embarrassed concern.

The price of copper was improved ¼ of a cent per pound during the week. Tin made a net decline of ½ of a cent per pound; zinc declined \$3 per ton and lead barely held at 6 cents per pound, East St. Louis.

The precious metals continue strong. Silver holds above 57 cents per ounce, recent heavy shipments to India being partly responsible for the strength of the market. Quick-silver has a range of \$128 to \$132 per 75-pound flask and the London price is the same at £23. Platinum is well settled at \$68 per ounce for the pure grade following the series of price declines three months ago.

Sentiment among the non-ferrous metals was helped by the favorable barometers of the steel industry. Unfilled orders of the Steel Corporation increased more than expected; steel

ingot production was 2 per cent better than in September. Though pig iron output fell 3 per cent, this did not represent current conditions because of the large quantities of iron piled up at steel-making plants.

The advance of 10 points in the export price of copper took place on Wednesday, bringing the price to 13.80 cents per pound, c. i. f. European ports. This was a rise of 20 points within 10 days. The domestic price became 13½ cents, delivered to the Connecticut Valley. However, a sharp decline in standard copper on the London Metal Exchange on Thursday somewhat curbed the optimistic feeling for the time being.

Foreign consumers of copper did not balk at the higher prices. This freedom of purchasing, irrespective of price, indicates that Europeans are buying to cover requirements actually in their own hands and are not attempting to speculate.

The American Brass Company advanced prices of several of its finished products, such as sheets and rounds, ¼ cent per pound on Wednesday, the first change on their part in two months.

Late in the week prompt tin was selling under 56 cents per pound, a new low for the year. Sales averaged 200 tons daily as against 400 tons daily the previous week. Further declines surprised many in the trade as it had been believed all unfavorable factors had been discounted thoroughly. These unfavorable features have been the less consumption of tin plate in canning, smaller automobile production so far this year, as well as declines in the minor fields of use.

Zinc was selling slightly over 5½ cents, East St. Louis, as the week drew to a close. A drop of \$2 per ton in zinc ore to \$35 was the severest blow to the industry. The ore price is the lowest since July, 1923, when the average quotation for that month was \$35.99 per ton. Sales of ore week before last were only half the production for the period.

Selling of lead was brisker last week and prices became a bit firmer towards the close. However, some second-hand lots were sold on Wednesday at under the prevailing price of 6 cents per pound, East St. Louis. Producers, however, would not veer from that figure. The American Smelting and Refining Company was pegged at 6.25 cents per pound, New York, as it has been for two months. The situation is strong enough in this country, but declines at London are quickly felt here just now. Prices are so balanced, here and abroad, that bullion lead from Mexico is on the point of entering the United States.

October Steel Production Increased But Still Below Last Year's Output.

Reports to the American Iron and Steel Institute from steel concerns which made over 95 per cent of the country's ingot output in 1926 show that during October 2,641,920 tons of open-hearth steel and 495,798 tons of Bessemer steel were produced. While this is a gain of 29,944 tons in open-hearth ingots and 24,343 tons in Bessemer ingots compared with September, it represents a decrease of 582,664 tons of open-hearth and 134,728 tons of Bessemer ingots compared with October, 1926.

For the 10 months ending October 29,876,267 tons of open-hearth and 5,220,254 tons of Bessemer steel ingots were produced, compared with 31,831,547 tons of open-hearth steel and 5,786,758 tons of Bessemer steel produced during the similar period of 1926.

Steel concerns during October operated 77.9 per cent of capacity, as compared with 76.56 in September and 97.48 per cent in October, 1927. Operation for the 10 months ending October was 87.48 per cent of capacity, as compared with over 95 per cent for the 10 months ending October, 1926.

RAILROADS

Earnings of Railroads for First Nine Months of 1927.

According to reports filed by the companies with the Bureau of Railway Economics, Transportation Building, Washington, D. C., Class 1 railroads for the first nine months in 1927 had a net railway operating income amounting to \$808,304,350, which was at the annual rate of return of 4.61 per cent on their property investment. During the corresponding period of the preceding year, their net railway operating income amounted to \$891,417,514, or 5.22 per cent on their property investment.

Gross operating revenues for the first nine months in 1927 amounted to \$4,654,873,475, which compares with \$4,764,635,482 during the corresponding period in 1927, or a decrease of 2.3 per cent. Operating expenses for the first nine months period of 1927 totaled \$3,472,756,316, comparing with \$3,500,006,044 during the corresponding period the year before.

In view of the fact that railway business and earnings fluctuate from year to year, only the showing of results over a period of years can indicate the real trend of railway returns. The rate of return on property investment for the five years period ending with the month of September, 1927, has averaged 4.65 per cent.

The net railway operating income of the Class 1 railroads in September amounted to \$132,770,069, which, for that month, was at the annual rate of return of 5.11 per cent on their property investment. In September 1926, their net railway operating income was \$145,763,441, or 5.76 per cent on their property investment.

Gross operating revenues for September 1927 amounted to \$565,090,904, compared with \$591,239,836 in September 1926, or a decrease of 4.4 per cent. Operating expenses in September totaled \$386,388,010, compared with \$398,762,376 in the same month in 1926, or a decrease of 3.1 per cent.

This compilation as to earnings in September is based on reports from 183 Class 1 railroads representing a total mileage of 238,534 miles.

Weekly Report of Car Loadings.

Loading of revenue freight during the week ended on October 29 totaled 1,112,621 cars, according to reports filed by the railroads with the Car Service Division of the American Railway Association. This was a decrease of 15,865 cars below the preceding week this year, reductions being reported in the loading of all commodities except miscellaneous freight and forest products, both of which showed increases. But the total was a decrease of 96,257 cars under the same week last year and 21,467 cars above the same week in 1925. Since January 1 last there have been 44,459,425 cars loaded with revenue freight, which compares with 45,101,716 cars loaded during the corresponding period of last year and with 43,430,103 cars loaded in the same period of 1925.

Wants to Be a Common Carrier.

The Lakeland Railway has applied to the Interstate Commerce Commission for authority to operate its 10 mile line at Lakeland, Ga., as a common carrier. It is stated in the application that the road is owned by and is to be operated by the city of Lakeland, which purchased it from the Milltown Air Line Railway Company, a former organization. Four commissioners have been named to supervise its operation. The line runs from Lakeland to Naylor, Ga., where connection is to be made with the Atlantic Coast Line.

Short Extension Plan in Florida.

Construction of 12½ miles of new line from Chipley to Graceville, Fla., is proposed by the Alabama & Western Florida Railroad, which has applied to the Interstate Commerce Commission for authority to undertake the work. A. E. Edge is general manager at Chipley, Fla. The road now consists of 38 miles of line from Chipley to South Port, Fla. It is noted that Graceville is an important point for the shipment of watermelons.

New Move to Improve Railroad Service.

To encourage new ideas and suggestions from employees for improving its service to the public and increasing the efficiency of its operations, the Pennsylvania Railroad has established at Philadelphia a Bureau of New Ideas. W. W. Atterbury, president of the company, asks employees for helpful and constructive suggestions concerning not only their own departments and divisions but any phase of railroad work which they feel can be improved and made more efficient. For instance, a mechanic in a shop or a track man may have an excellent and original idea for getting new business, or a traffic solicitor may have a workable suggestion for greater economy in the use of materials and supplies.

Louisville and Nashville Buys a Coal Line.

A press report from Lexington, Ky., says that the Louisville & Nashville Railroad has purchased a private railroad line on Martin's Fork of the Cumberland River, including the right of way for an extension to Smith, Ky. The price reported paid is \$500,000. The deal appears to be in line with the plans of the Louisville & Nashville to connect with the Clinchfield Railroad, surveys for a line having been made from Harlan, Ky., to Speers Ferry, Va., about 40 miles, for the transportation of Kentucky coal to the Southern Atlantic States. The newly purchased line is said to penetrate one of the richest coal fields known. The present plan of the trunk line is to build 14 miles to a connection with the Cumberland Division, which will give immediate connection over the latter and the Interstate Railroad to the Clinchfield Railroad, this to be used until the direct line to Speers Ferry is constructed.

Thinks More Railroad Equipment Is Needed.

The Railway Business Association, Packard Building, Philadelphia, Pa., has published a leaflet written by President Alba B. Johnson concerning railway capital programs and which directs attention to an apparently serious situation as follows: "As has recently been usual the installations of locomotives and cars were fewer than the retirements, but whereas heretofore through enlargement of units the total car and power capacity have constantly increased, the turn has come. The freight locomotive increments and modernizations since January 1 were exceeded by retirements measured in tractive pounds of effort and the car capacity owned October 1 is only a quarter of 1 per cent greater than on January 1."

President Johnson further remarks: "Apart from the anxiety which all concerned should feel over transport preparedness at any normal time, are we not confronted with a probable traffic emergency in 1928? I allude to the strengthened buying power of the farmers and to the impending resumption of low-priced automobile manufacture now held back for a demonstration of the new Ford model."

Frank W. Noxon is secretary of the association.

H. E. Cranford has been appointed traveling freight and passenger agent of the Seaboard Air Line, with office at 101 Home Bank Building, Wilmington, N. C., succeeding W. E. Scull, Jr., who resigned to go with another company.

GOOD ROADS AND STREETS

Program for Annual Meeting of Highway Research Board.

The Highway Research Board of the National Research Council will hold its seventh annual meeting on December 1 and 2 in the building of the National Academy of Sciences and the National Research Council, Washington.

At the opening session T. R. Agg of the Iowa State College will preside, and an address of welcome will be made by Vernon Kellogg of the Council, followed by an address by Frank B. Jewett of the Division of Engineering and Industrial Research. Charles M. Upham, director, will make his report. A. B. Fletcher will report for the Committee on Causes and Prevention of Highway Accidents, W. C. Markham, of the American Association of State Highway Officials, will preside at the afternoon session, and Thos. H. MacDonald, chief of the United States Bureau of Public Roads, will make the principal address. T. R. Agg will present the report of the Committee on Economic Theory of Highway Improvement. A. T. Goldbeck will report for the Committee on Structural Design of Roads, and H. S. Mattimore, of the Pennsylvania State Highway Department, for the Committee on Character and Use of Road Materials. On Thursday evening the delegates at dinner will be addressed by C. F. Kettering, president of the General Motors Research Corporation.

G. M. Braune will preside at the opening session on December 2. Reports to be presented include: Committee on Highway Traffic Analysis by Geo. E. Hamlin of the Connecticut State Highway Commission; Committee on Highway Finance by H. R. Trumbower of the University of Wisconsin; Committee on Maintenance of Highway Finance by W. H. Root of the Iowa State Highway Commission. H. G. Shirley, of the Virginia State Highway Commission, will preside at the afternoon session. The report on Low Cost Improved Road Investigation by the committee headed by C. N. Conner will be presented, and about 10 leading highway engineers will participate in the general discussion.

The business meeting will immediately follow the afternoon session; T. R. Agg will be the presiding officer.

\$4,000,000 Cooper River Bridge Plans.

Charleston, S. C.—A revision of plans for the proposed Cooper River Bridge here, originally estimated to cost \$3,600,000, will increase this cost to approximately \$4,000,000, it is announced. The revised plans call for a structure 15 feet higher with a span 150 feet longer. They have been submitted to the War Department in Washington and if the bridge is approved and constructed a horizontal clearance of 750 feet will be provided with vertical clearance of 150 feet. The structure will be built by the Cooper River Bridge, Inc., financed by H. M. Byllesby & Co. and the Federal Securities Company, both of Chicago.

Opening of Highway to Be Celebrated.

South Hill, Va.—Plans are rapidly maturing for the South Hill road opening celebration to be held here on November 26, when the last link in the highway between Richmond and Raleigh, N. C., shall have been completed. Col. Hiram Wall, chairman of the road opening committee, has named a number of sub-committees to carry on the work of his organization, and has appointed M. M. Carver of South Hill as chairman of the program committee. Governor Harry Flood Byrd of Virginia will preside at the celebration, while Governor

Angus W. McLean of North Carolina has been invited as one of the guests of honor. Other invited guests include all Virginia judges and many other distinguished people. A big warehouse here has been secured for the addresses and among the speakers will be Governors McLean and Byrd, former Governor Trinkle of Virginia, Commissioner Frank Page of the North Carolina Highway Department and Henry G. Shirley, chairman of the Virginia State Highway Commission.

Constructive Resolutions of State Highway Officials.

The American Association of State Highway Officials at its annual session held last month at Denver, Col., adopted resolutions summarized briefly as follows:

1. **Oppose Private Billboards and Advertising on or Near Highways.**—It is pointed out that such signs tend to create travel hazards, impair the value of warning and guide signs and destroy the scenic beauty. The States are, therefore, urged to adopt legislation authorizing the removal of such signs from the highways. The placing of advertising signs on property adjacent to highways is deplored.
2. **Railroads Should Bear Not Less Than 50 Per Cent of Cost of Eliminating Railroad Grade Crossings.**—The association suggests that all grade crossings be eliminated as rapidly as funds are available.
3. **States Should Prohibit Imitation or Defacement of Danger Signs Along the Highways.**—The value and efficiency of standard guide and warning signs depends to a large extent on their distinctive character and appearance; hence, legislation should be adopted prohibiting imitation of these signs and suitable penalties be provided for the enforcement thereof.
4. **Congress Should Protect the Public in Erection of Toll Bridges.**—The resolution adopted at Pinehurst, N. C., in November, 1926, relative to the construction of toll bridges was reaffirmed and Congress is urged to adopt suitable legislation in conformance therewith.
5. **Needed Changes in the Federal Highway Act.**—Amendments as follows are suggested: A—That the public land States, having a population less than ten people to the square mile, be permitted to apply Federal aid in the sum of 100 per cent of the cost of projects forming necessary connecting links in the Federal aid system of a given State or of adjoining States and necessary to provide continuous lines of travel within or across said States; provided, however, that the above recommendation shall not affect the basis of participation with the Federal Government in the said States. B—That the limitation of Federal participation to a maximum of \$15,000 per mile should be repealed as it is inadequate and gives no consideration to the cost of construction due either to topography, physical conditions, or to traffic requirements, and the amount of Federal aid that can be used on any such project should be limited only by other provisions of existing Federal statutes.
6. **Federal Aid Authorizations Should Continue for 1930 and 1931.**—Congress has for several years been authorizing Federal aid to States in road construction in the sum of \$75,000,000 annually and has likewise been authorizing Federal appropriations of \$7,500,000 annually for forest roads, but the last of these authorizations under the existing law are for the fiscal year ending June 30, 1929. It recommends that these appropriations be continued and that the Federal Government appropriate funds for the construction of necessary connecting links of standard highways over forest lands and appropriated and unappropriated public lands and Indian lands in an amount sufficient to complete the work within such lands as rapidly as work is progressing on the system of highways outside these lands.
7. **Congress Requested to Invite International Association of Road Congresses.**

Resolutions were also adopted expressing appreciation for courtesies extended the delegates to the city of Denver, the Colorado State Highway Department and the Colorado Good Roads Association and Tourist Bureau.

Alabama Asks Bids on 250 Miles Roads.

Montgomery, Ala.—Bids will soon be received by the Alabama Highway Commission for the construction of a number of road and bridge projects, the former to cover approximately 250 miles. The commission will receive bids until November 22 for 11 road projects to cover about 66 miles, alternate estimates to be received on plain cement concrete, bituminous concrete, sheet asphalt, sand-rock asphalt and limerock asphalt. Proposals will also be received until the same date for a bridge project in Monroe county to embrace the construction of three structures.

Proposals will be received until November 29 for 12 road projects covering a total of about 184 miles, of which 6 projects cover approximately 88 miles, on which alternates will be received on bituminous macadam, bituminous concrete, bituminous macadam, rock asphalt and sheet asphalt. Estimates will also be received on 12.22 miles of grade and drainage construction, 8.61 miles of top soil, 7.48 miles of chert, 18.89 miles of bituminous seal coat treatment, 32 miles of bituminous surface treatment and 17.62 miles of sand-clay road. Included in this letting bids will also be received on bridge projects Jefferson county, Russell county, Autauga county and Morgan county.

Plans Approved for \$6,000,000 Bridge and Causeway Near Tampa.

Tampa, Fla.—According to a recent announcement in Washington, Army engineers have approved plans, with certain modifications, for the construction of a bridge and causeway over Tampa Bay between Piney Point and Pinellas Point, estimated to cost \$6,000,000. The project is being promoted by Dr. H. Simmonds of this city and associates, and it is understood that financial details have been arranged. The proposed modifications relate to the draw and span, Army engineers in Washington concurring with recommendations of Col. Mark Brooke of the Jacksonville district and of the division engineer at Charleston, S. C.

Texas County to Vote on \$1,000,000 Road Bonds.

Wheeler, Texas.—An election has been called for December 3 by the Commissioners' Court of Wheeler County on a \$1,000,000 road bond issue. Tentative plans call for 68 miles of primary roads and about 100 miles of laterals, the former to include 30 miles of highway No. 66 across the county from the Oklahoma line to the Gray county line; highway No. 4 crossing the county from north to south, and highway No. 33 to connect with the Gray county line toward Pampa. It is planned to expend about \$680,000 for paving purposes, \$200,000 for improving lateral roads and \$120,000 to refund outstanding bonds of the county.

To Vote on \$1,000,000 Highway Bonds.

Ripley, Tenn.—A resolution has been adopted by the Quarterly County Court for Lauderdale County requesting the election commissioners to call an election December 20 on a \$1,000,000 bond issue for building and maintaining roads. The court also voted for an appropriation of \$65,000 to meet Lauderdale County's share in the completion of Highway No. 19.

Low Bid on Arlington Bridge \$1,576,686.

Washington, D. C.—The low bid for the construction of the superstructure of the \$10,000,000 Arlington Memorial Bridge under construction here, has been submitted by the Hunkin-Conkey Construction Company of Cleveland, Ohio, at \$1,576,686. The bid carries a time limit of 700 days. Alternate

deductions running from \$40,000 to \$70,000 in case no underpass is constructed on the District end of the bridge, were submitted.

The bridge will be 2100 feet long, consisting of 9 arch spans with a bascule forming the central span to have a waterway width of 184 feet, while the overall width of the bridge will be 90 feet, including roadways and sidewalks. It will cross the Potomac River from the Lincoln Memorial to Arlington Cemetery. H. D. Converse & Co. of Boston, Mass., are the contractors for piers and abutments.

The bridge is being erected by the Arlington Memorial Bridge Commission with Lieut. Col. U. S. Grant, 3d, as executive and disbursing officer. John L. Nagle of Washington is the engineer.

Program of Sixth Annual Asphalt Paving Conference.

The sixth annual asphalt paving conference will be held at the Atlanta-Biltmore Hotel, Atlanta, Ga., November 28 to December 2, inclusive, under the auspices of the Asphalt Association and the Association of Asphalt Paving Technologists.

At the first session on the afternoon of November 28 addresses will be made by J. S. Helm, president of the Asphalt Association; H. W. Skidmore, president of the Association of Asphalt Paving Technologists; Governor L. G. Hardman of Georgia; Governor Bibb Graves of Alabama, and Mayor I. N. Ragsdale of Atlanta. The presiding officers at the various sessions will include: J. S. Helm, H. W. Skidmore, F. P. Smith, Col. Woolsey Finnell, C. E. Jones and Col. R. Keith Compton.

Papers will be presented as follows:

A Survey of the Equipment Field—Charles M. Upham, business manager, American Road Builders' Association, Washington.

A Survey of the Surface Treatment Field with Particular Reference to Asphaltic Materials—C. N. Conner, chairman, Low Cost Improved Roads Committee, Highway Research Board, Washington.

Variation in Asphalt Film Thickness on Mineral Aggregates in Relation to Design and Control of Paving Mixtures—A. R. Ebberts, engineer of tests, Allegheny county, Pa.

Variations in Absorption of Asphalt by Different Mineral Aggregates—A. W. Dow, chemical engineer, New York.

Relative Effectiveness of Various Methods of Compressing and Controlling Uniformity of Contour of Asphalt Paving Mixtures—R. D. Kneale, vice-president of Sam Finley, Inc., Atlanta, Ga.

The Gasoline Drip Test for Asphalt Paving Mixtures with Relation to Thickness of Film and Resistance to Water Action—H. L. Howe, Jr., director of Municipal Testing Laboratory, Rochester, New York.

Factors Affecting the Stability of Asphalt Paving Mixtures—F. P. Smith, chemical engineer, New York.

Research Data Confirming Voidage and Shear Strength Design of Sheet Asphalt Paving Mixtures—H. W. Skidmore, president, Chicago Paving Laboratory, Chicago.

Evaluation of Sands for Sheet Asphalt Pavements—Prevost Hubbard, chemical engineer, The Asphalt Association, New York.

Adaptation of the Stability Test to Plant and Field Control—F. C. Field, chemist, The Asphalt Association, New York.

Preliminary Results from the Asphalt Test Road in Louisiana—J. H. Bateman, director, Engineering Experimental Station, Louisiana State University, Baton Rouge.

Administration Policies in Connection with the Development of Highway Programs—Thomas H. McDonald, director, U. S. Bureau Public Roads.

Recent Researches in Portland Cement Concrete and Their Application to the Design of Bases for Asphalt Pavements—Roy M. Green, manager, Western Laboratories, Lincoln, Neb.

Relative Advantages of Smooth and Rough Texture Asphalt Surfaces—A. H. Blanchard, consulting engineer, Toledo, Ohio.

Effect of Special, Unusual or Non-Essential Tests in Asphalt Specifications—Julius Adler, consulting engineer, Philadelphia, Pa.

Black Base in Southern States—Warren G. Booker, consulting engineer, Charlotte, N. C.

Gravel and Stone Bases for Asphalt Wearing Courses—E. N. Seymour, engineer in charge of asphalt work, Georgia State Highway Commission.

Asphalt Surfaces for Old Portland Cement Concrete Pavements—V. L. Ostrander, branch manager, The Asphalt Association, Albany, New York.

Economic Management of a County Highway System—W. S. Hawkins, county engineer, Gulfport, Miss.

Maintenance Requirements and Service Records and What They Have Developed—G. F. Fisk, first assistant city engineer, Buffalo, New York.

Educational Advancement of Asphalt Paving—L. B. West, West Construction Company, Chattanooga, Tenn.

TEXTILE

New York Textile Plant Will Move to Georgia— To Consolidate With Lullwater Manufacturing Company.

Operating plants at Syracuse and Arcade, N. Y., for the past 20 years in the manufacture of heavy ribbed underwear, sweater coats, sport coats, sleeping garments and other knitted fabrics having a percentage of wool, the Oak Knitting Company will move its plants to Georgia, according to a letter from C. L. Emerson, vice-president of Robert & Co., Inc., Atlanta, engineers for the project. Mr. Emerson writes:

"On account of the tremendous difference in manufacturing costs in Georgia and New York State, Mr. A. G. Velasko, president of the Oak Knitting Company, decided to move his plants to this locality. The company has formed a combination with the Lullwater Manufacturing Company, owned by Walter T. Candler, and will utilize the entire plant located at East Point, Ga. The mill of 5000 spindles, manufacturing cotton yarns, will remain intact, while the remaining equipment in the Lullwater mill will be removed and all machinery of the Oak Knitting Company at Arcade and Syracuse will be removed to East Point and consolidated in the Lullwater plant.

"A new organization to be known as the Oak Knitting Company of Georgia will operate the plant, which will have a capacity of approximately 700 dozen garments per day, the output to be sold by Tatum-Pinkham & Greey of Worth street, New York. The operating personnel will not be materially changed. Mr. Velasko will be president; C. J. Purnell, general manager, and T. W. Fletcher of Nashville, Tenn., added as secretary and treasurer.

"Caldwell & Co. of Nashville are handling financial details for the new company, and it is reported that upon consolidation first mortgage bonds in the amount of \$380,000 will be issued. The new Industries Department of the Atlanta Chamber of Commerce was active in helping to locate this plant at East Point, which is only five and one-half miles from Atlanta, and Mr. Velasko predicts a very rosy future for this well-established firm in its new and favorable location."

Increases Capital to \$2,000,000.

Ware Shoals, S. C.—An increase in the capital stock of the Ware Shoals Manufacturing Company from \$1,300,000 to \$2,000,000 has been approved by the Secretary of State, it is announced, and it is understood that the new stock will be issued in the form of 7000 shares of preferred at \$100 per share. The increased capital may be used for the enlargement of the mill here, for which plans were prepared last spring. At that time it was reported the company would build an addition, 304 by 134 feet, of steel construction and install 30,000 spindles, all at a cost of \$1,000,000.

Completing Thies Dyeing and Processing Plant.

Belmont, N. C.—The new buildings under construction here for the Thies Dyeing and Processing Company are about complete and the installation of mechanical equipment and machinery is now under way. Contract for installing electrical equipment, power and lighting wiring has been awarded to Michael & Bivens, Inc., Gastonia, N. C. J. E. Serrine & Co. of Greenville, S. C., are the engineers.

The present plant of this company is engaged in dyeing and bleaching yarns in wound form, cops, tubes, cones, beams and raw stock. It has a capacity of 100,000 pounds per week.

Enlargement Planned for Fort Mill Plant.

Fort Mill, S. C.—Plans are reported being prepared by Lockwood, Greene & Co., with offices in Spartanburg and Charlotte, for the enlargement of the plant here of the Fort Mill Manufacturing Company, although definite details have not been announced. This company operates mills Nos. 1 and 2 here, the former being equipped with 20,304 spindles and 380 wide looms, and the latter with 21,664 ring spindles and 400 broad looms, for the production of sheetings. The proposed improvements will not proceed at this time.

New Print Works to Adjoin Southern Bleachery.

Preliminary surveys have been made and construction will be rushed on a print plant at Taylors, S. C., adjoining the Southern Bleachery, according to H. S. Stephenson, president of Southern Bleachery, Inc., Greenville, S. C., which operates a mill at Taylors. J. E. Serrine & Co., Greenville, are the engineers. Preliminary surveys for the plant have been made and construction will be rushed. It will be erected by a new company to be capitalized at \$1,000,000 and will be equipped with four printing machines and full dyeing equipment. Contracts have not been awarded.

Constructing Braid Plant at Laurens, S. C.

Outlining details for the construction of a plant at Laurens, S. C., for the Pioneer Braid Corporation, R. E. White, Jr., of Sidney M. Edelstein & Co. of Union, S. C., industrial engineers, advises that work began October 27 on the plant building and that it is expected to be ready for occupancy by January 15, 1928. The structure will be of the standard mill type and will contain 20,000 square feet of space, all on one floor. It will be owned by the Pioneer Holding Corporation which is handling the construction by day labor. J. W. Todd of Laurens is secretary and treasurer of both companies. Joseph M. Aldman is president of the Pioneer Braid Corporation and its directors include A. C. Todd, J. McD. Moore, Albert Dial, E. D. Easterby, H. Douglas Gray, C. F. Fleming, C. E. Kennedy and Mr. Aldman.

Machinery and equipment for the plant will be moved from New York city, where the company operates 300 braiders for the production of braids and soutaches. It will install in the plant at Laurens sewing machines and balbriggan knitting machines for making rayon knit underwear.

Improvements for South Carolina Mill.

The Appleton Company, Lowell, Mass., has decided to close its mill and to remove approximately 30,000 spindles and 850 looms, with preparatory machinery, from its Lowell plant to the plant of the Appleton Manufacturing Company at Anderson, S. C. To take care of the additional machinery, contracts have been awarded to the Townsend Lumber Company of Anderson, and to Potter-Shackelford, Inc., of Greenville, S. C., for the necessary extension of the present mill buildings and for the erection of a cloth room and warehouse. J. E. Serrine & Company of Greenville, engineers for the project, advise that the new weaving building will be two stories, 280x205 feet, of the daylight type of construction, with brick pilasters, cast iron columns and steel beams. It will have an ultimate capacity of 1,500 looms.

To provide houses for employees required to operate the additional machinery, the company plans to erect about 200 dwellings. It will also build a new office structure, although contracts for the dwellings and office building have not been awarded. Approximately \$800,000 will be expended.

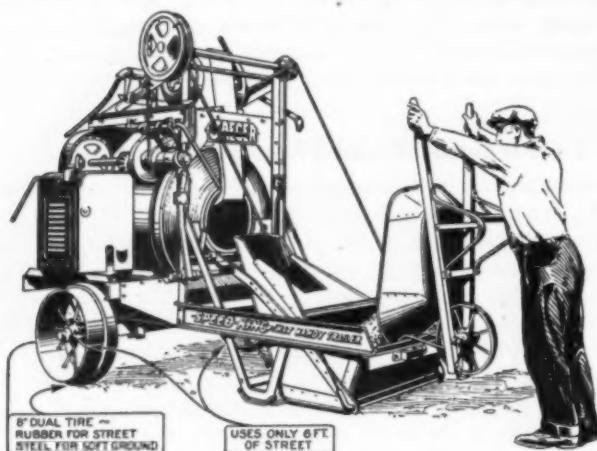
The Anderson plant is now equipped with more than 30,000 spindles, 942 looms and dyeing department for the production of canton flannels and cotton dress goods.

MECHANICAL

Rapid, Light and Handy Concrete Mixer.

A new, all-steel, one-bagger concrete mixer is shown here. It not only stands up, it is claimed, under high-speed trailing, having springs and roller bearings, with dual wheels, but is an end-discharge type, which has all the advantages of side discharge and in addition saves time, the wages of wheeler on discharge end; on large floors, walks, curb or alleys concrete can be poured into forms and mixer moved with work like a paver. It is known as 75 "Speed King" mixer.

The manufacturers, the Jaeger Machine Company of Columbus, Ohio, say this type has long been wanted by road builders and contractors; it is more compact, requiring only 6 feet of street space, with loader, and will work in congested streets or places. Being steel, it is not only lighter



NEW MIXER AS IN USE.

but 50 per cent stronger on account of all-steel construction. The outfit is all roller bearing equipped. It is of the trailer type for portability, and is so balanced one man can lift it and handle like an ordinary small tilter trailer; a Ford truck will tow it anywhere.

This new line is built in low charger or loader type, with accurate measure water tank. The loader has the patented "Skip Shaker," which eliminates pounding on the skip to unload, and is very fast, as also is the discharge. Special valuable attachments can be furnished for road or sidewalk contractors.

Improved Pull Shovel or Trench Hoe.

A new type of pull shovel or trench hoe which offers some unusual advantages for sewer and excavating work has been put on the market by the Thew Shovel Company, of Lorain, Ohio. It is called a back digger by the company because it is more than a trench machine, being very efficient in cellar work and other kinds of digging. The primary difference between this and previous types is in the control of the dipper, which can be tilted by the operator to any angle desired, at any stage of the digging or dumping operation, and held in position or changed by the operator at will.

Instead of spilling the dipper load through the entire arc of the digging arm as with the stationary dipper type, this tilting dipper permits the operator to hold the load until he has spotted the dipper exactly where wanted, over a wagon, a truck, or a spoil pile, after which the dipper can be instantly dumped. When dumping close, much time is saved because it is unnecessary to swing the dipper to the

extreme limit each time to completely empty it. When sticky material is handled the operator can shake the dipper to dislodge completely all the unspilled material.

The control of the dipper tooth angle at any position of the digging arm also provides digging advantages not possi-



PULL SHOVEL IN OPERATION.

ble with the stationary type of dipper. In basement digging it permits trimming the sides and bottom of the excavation or making a straight vertical cut at the start of a trench or at the finish. The tilting dipper is also a great aid in back filling. The dipper can be pulled to the edge of the trench in a horizontal position, pushing the dirt before it and can then be tilted to empty the dipper into the trench. The ability to hold the dipper in any position while back filling, permits cleaning up the entire spoil pile without gouging into the solid ground beneath it.

This equipment can be attached to any Lorain-75 or Lorain-60 shovel now in the field. The change can be made easily and quickly.

Pumps That Handle Sewage Without Clogging.

A new type of pump, designed specially to handle raw sewage, pulp, trash and other liquids containing solid or semi-solid particles without clogging at the impeller, is being utilized by the Bureau of Sewers, Brooklyn, N. Y., at Caisson No. 3, Coney Island, where two units, one with 12-inch and the other with 10-inch suction and discharge, have, it is remarked, shown exceptional freedom from interruption. These two pumps receive the sewage after it comes through the purifying and settling tank and deliver it into the discharge main. Both are of vertical design with overhead electric motor drive, but horizontal units are also built with the same pumping characteristics.

The outstanding features of these pumps in both vertical and horizontal design are the volute casing with special provision for smooth flow and ready access to internal parts, and the impeller, which is made of bronze or hard cast iron as conditions may demand. The impeller is semi-open with two heavy curved vanes to form extra large water passages. It is finished smooth on the inside with rounded ends, is adjusted to rotative balance, runs with minimum clearance, and is of a design which does not permit rags to grind between the vanes and casing. For some of the pump sizes, the impeller is designed to pass solids of one inch smaller dimension than the pump suction and discharge diameter.

The construction of the impeller and the ability to pass large solids is indicated in the picture which shows the

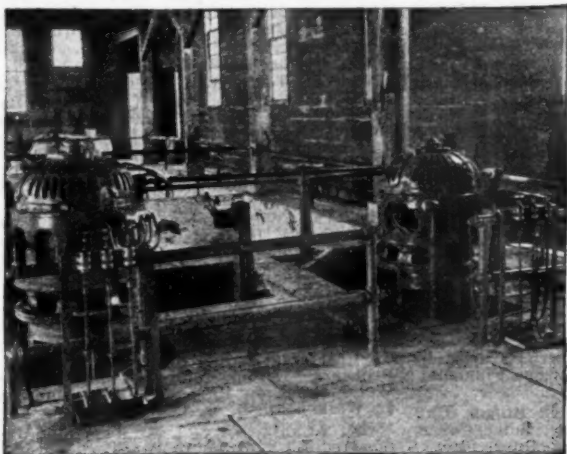
impeller from a pump of 10-inch suction and discharge and some of the material passed without clogging of this impeller in its shop test. The material includes rags, pairs of overalls, 4 by 4 inches wooden blocks, 4 inches, 6 inches and 7 inches



IMPELLER AND MATERIAL HANDLED.

long, and sticks 36 inches long. Overalls came out whole or chopped into two, three or four pieces, and long sticks were chopped into short pieces. The length of the longest stick that went through without breaking was 12 inches. The action in chopping up pieces that are too long to go through is like that of an ensilage cutter.

Pump units of the horizontal type have the same internal



INSTALLATION AT CONEY ISLAND.

mechanism; but the casing is furnished solid or horizontally split as desired.

These pumps are built by the Morris Machine Works, Baldwinsville, N. Y., in sizes having suction and discharge openings ranging from 3 inches to 20 inches, impellers from 8 inches to 40 inches, to pass solids of maximum dimension ranging from 2 inches to 12 inches and for maximum capacities of from 450 to 16,000 U. S. gallons per minute. The units at Coney Island were installed by the Central Engineering and Contracting Company of New York.

\$1,000,000 Paint Factory Reported for Dallas.

Regarding the proposed establishment of a \$1,000,000 paint factory in Dallas, Texas, the Everlasting Paint and Sales Company of Los Angeles, Cal., wires that its plans for Texas operation have not been completed but that there is a possibility of locating a plant there. The company manufactures protective paints and a preparation for curing concrete. It is understood that arrangements have been made with the State Highway Commission for a test mile of this process near Laredo.

High Speed Surfacers for Concrete Road.

In the accompanying illustration is shown in use the Berg concrete highway surfacer which, it is claimed, makes possible improved concrete roads free from all high spots and uneven joints. This machine, it is observed, is a result of years of study and experiment and it effectively does its work by making a smooth and wholly satisfactory surface to concrete roads. It is made by the Concrete Surfacing Machine Company, of Cincinnati, Ohio, and it is said that in the hands of one man it can do the work of about ten men working under ordinary conditions and methods.

The machine is of all steel construction, simple and strong. It is built of the highest grade materials; it is easily operated, and it is not necessary to have special instructions to



SURFACER IN USE ON ROAD.

use it. The cutting tool is connected with an air-cooled gas engine by a flexible coupling and it operates through hardened bevel gears which run in oil. Shafts and gears are carried on Timken roller bearings. The machine is only 3½ feet long complete and is mounted on a steel chassis. It weighs about 240 pounds. Two iron wheels at the rear end of the chassis and a swivel caster in front make it easy to haul the machine from place to place.

Raising the swivel caster lowers the cutter head and brings it in contact with the surface of the road. The cutters, which are 24 to a set, are each 3/16 inch wide and 2 inches in diameter; they are star-shaped and have 18 points, the whole being made of high grade steel hardened by a special process; they are mounted on four and one-half inch hard heat-treated steel pins. It is stated that the cutters make contact with the road surface at the rate of 1,600,000 times a minute during the 1200 revolutions per minute of the eight-inch cutter plate, thus grinding the surface by cutter action contact 100,000,000 times per hour. Each machine is supplied with two cutting plates mounted with cutters so that when one set of cutters is worn they can be removed and the other set installed in a few minutes.

Wholesale Prices of Plumbing Fixtures.

October wholesale prices of standard plumbing fixtures for a six-room house, as collected by the Department of Commerce from reports of 12 representative manufacturers and wholesalers, were \$104.71, as compared with \$104.51 in September and \$106.19 in October, 1926. The index number in October, based on 1913 as 100, was 154.9.

CONSTRUCTION DEPARTMENT

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained.

The date at the end of an item indicates issue of the Manufacturers Record in which earlier facts about the same enterprise were published.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$30.00 a year.

Airplane Plants, Stations, Etc.

Mo., Kansas City—City, reported, proposes spending \$1,000,000 on airport; H. F. McElroy, City Mgr. See Financial News—Bond Issues Proposed. 10-20

Tex., Amarillo—Board of City Development, plan bond issue for purchase and equipment of municipal airport. See Financial News—Bond Issue Proposed.

Tex., Brownsville—Airport Committee of Chamber of Commerce, interested in establishing municipal airport.

Tex., San Antonio—City, Phil Wright, Acting Mayor, receiving bids for erection hangar, Winburn Field, south loop; standard fireproof.

Tex., Wichita Falls—Wichita Falls Air Transport Co., incorporated; A. Armstrong, Roy A. French, Neal Powers.

Bridges, Culverts and Viaducts

Proposed Construction

Alabama—State Highway Comn. receives bids for culverts. See Roads, Streets, Paving.

Ala., Birmingham—Jefferson County Board of Revenue, receives bids Dec. 13 for timber viaduct across Southern Ry. tracks at Lovick; 25,000 ft. B. M. cross-tied timber trestle; plans from C. J. Rogers, County Highway Engr.

Ala., Town Creek—State Highway Comn., Woolsey Finnell, Highway Director, Montgomery, will supervise construction of two-way concrete bridge over Town Creek, 3 mi. west of Town Creek City, on Decatur Pike; replace present steel bridge; W. A. McCalla, State Highway Engr.

D. C., Washington—Arlington Memorial Bridge Comn., U. S. Grant, Third, Lt. Col. Corps of Engrs., Executive and Distributing Officer, received low bid from Hunkin-Conkey Construction Co., Cleveland, at \$1,576,686 for superstructure of Arlington Memorial Bridge, connecting North and South across Potomac River, between Lincoln Memorial and Arlington Cemetery; alternate deductions from \$40,000 to \$70,000, were submitted, in case no underpass is constructed on District end of bridge; John N. Nagle, Designing Engr. 10-6

Ga., Cordele—State Highway Board, East Point, considering bridge in connection with power dam on Flint River, between Crisp and Lee Counties; John N. Holder, Chmn.

Ga., Jekup—State Highway Comn., John N. Holder, Chmn., East Point, plans letting contract in Dec. for bridge at Doctortown, on Oglethorpe Highway.

Ky., Catlettsburg—City, James R. Barbee, Clk., receives bids Dec. 5 for 130-ft., two 65-ft. spans, deck plate girder bridge, including substructure, on Center St., over Catletts Creek; plans from Frank L. Adams, Bridge Engr.; Robert Owens, Mayor.

La., Covington—Town, W. M. Poole, Mayor, receives bids soon for bridge across Bogue Falaya River at Covington. Address Engr. Mundinger.

La., New Orleans—City Comn., received low bid from John Riess, New Orleans Bank Bldg., New Orleans, at \$26,550, for reinforced concrete bridge across Seventeenth Street canal, at South Claiborne Ave.

Miss., Cleveland—Bollivar County granted franchise to E. M. Elliott and Associates, Inc., 340 Michigan Blvd., Chicago, Ill., for approach on Mississippi side to toll bridge across Mississippi River at Arkansas City, Ark.; Desha County, Ark., previously granted similar franchise; permit from War Dept., Washington, D. C., will have to be granted; construction expected to start within 12 months.

Mo., Kansas City—City, H. F. McElroy, Mgr., plans expending \$1,000,000 toward Winner Road Viaduct. See Financial News—Bond Issues Proposed. 10-20

Mo., St. Joseph—City, Louis V. Stigall, Mayor, considering toll-free bridge over Missouri River, multiple arch reinforced concrete structure, consisting of series of concrete arches to take place of trusses and overhead work; approaches high enough to form overhead pass over railroad tracks on this side of river, reaching street level at Fourth St.; approximate cost \$550,000; Howard, Harrington & Ash, Consult. Engrs., 1012 Baltimore Ave., Kansas City, Mo., preparing plans. 10-20

N. C., Asheville—City, Gallatin Roberts, Mayor, plans high bridge over French Broad River, connecting east and west sections on even grade; Stanley H. Wright, Chief Engr. for city.

N. C., Fayetteville—See Roads, Streets, Paving.

N. C., Hickory—Southern Ry. System, B. Herman, Ch. Engr., Washington, D. C., plans widening Fourteenth underpass; H. W. Miller, V.-P.

Okla., Oklahoma City—Oklahoma County, J. W. Berry, Clk., receives bids Nov. 21 to build and repair 4 bridges and 4 culverts: Bridge No. 14—7.1; No. 14—7.9; Bridge No. 14—9.2; repair Bridge No. 31—1.5; Culverts Sec. 34 ml. 11-14; Sec. 31, ml. 13; Sec. 4, ml. 11-14; Sec. 10, ml. 3; plans on file.

Okla., Ponca City—Chamber of Commerce approved plans and estimates for construction of Santa Fe underpass at South Ave.; two 18-ft. roadways, each one-way drive, concrete center supports; approximate cost \$200,000.

Okla., Tulsa—City, Herman F. Newblock, Mayor, plans Sixth Street underpass at Midland Valley R. R. intersection. See Financial News—Bond Issues Proposed.

Okla., Tulsa—M-K-T R. R., F. Ringer, Ch. Engr., St. Louis, Mo., plans viaduct over Katy tracks at Frisco Ave. intersection; \$25,000 available.

Tenn., Paris—See Roads, Streets, Paving.

Tenn., Perryville—Dept. of Highways and Public Works, C. N. Bass, Ch. Highway Engr., Nashville, applied to War Dept. for permit for bridge across Tennessee River, about 3000 ft. from Perryville; Plan No. 1 has pier on top of left and right bank, and in middle of river; clear opening between river pier and extreme low water line of right bank and of left bank are same, being 298 ft., clear openings between river pier and right and left bank piers are same, being 355 ft.; Plan No. 2 has 2 piers in river with piers on top of left and of right banks, clear opening of main channel span between river piers is 355 ft., located about middle of river, clear distance between extreme low water line of right bank and right river pier, about 120 ft., and between pier on right bank and right river pier, 223 ft.; hearing to be held Nov. 25; Maj. Lewis H. Watkins, U. S. Dist. Engr.

Tex., Archer City—See Roads, Streets, Paving.

Tex., Austin—See Roads, Streets, Paving.

Tex., Bon Wier—State Highway Dept., R. S. Sterling, Chmn., Austin, plans bridge over Sabine River, Newton County, between Bon Wier and Merryville, La.; R. A. Thompson, State Highway Engr.

Tex., Conroe—Montgomery County, W. H. Lee, Judge, Harris County, Norman Atkinson, County Judge, plans .359 mi. bridge and approach across Spring Creek, Highway No. 19, Houston-Conroe Road, between Harris and Montgomery County; A. J. Wise, Houston County Engr.

Tex., Houston—War Dept., Washington,

D. C., approved plans of City of Houston, George Woods, Mgr., for bridge over Buffalo Bayou at Adams St.; J. C. McVea, City Engr. 9-15

Tex., New Braunfels—State Highway Comn., R. S. Sterling, Chmn., Austin; Comal County, Carl Roepert, Judge; City, H. F. Triesch, Mayor, and M. K. & T. Ry. Co., F. Ringer, Ch. Engr., St. Louis, Mo., plan bridge across Comal Creek on Highway No. 46, including underpass approach under M. K. & T. Ry. tracks across Seguin St.; Cantilever girder bridge, with two 28-ft. spans at each end, two 56-ft., two 60-ft. and 64-ft. span, total length 352 ft.; 6 concrete piers, 2 concrete abutments, concrete retaining walls, pavement, sidewalks, etc.; or 8 I-beam, seven 40.5-ft. spans, length 313.5 ft.; two 15-ft. concrete abutment approaches, retaining wall, concrete floor and sidewalks; earth approach fill at west end of bridge; east end approach, 75-ft. concrete underpass, with 12-ft. vertical clearance; 20-ft. roadway, two 5-ft. cement sidewalks; receive bids probably Dec. 12; estimated cost \$87,000; G. G. Wickline, Bridge Engr., Austin.

W. Va., Terra Alta—Baltimore and Ohio R. R. Co., A. H. Lane, Ch. Engr., Baltimore, Md., is erecting \$20,000 two-way steel and concrete bridge over tracks on Bridge St., connecting Crane Ave. and State St., West Terra Alta; Walter Brown, Brownsville, Md., in charge; will close grade crossing on Chestnut and Alford St.

W. Va., West Union—Baltimore & Ohio R. R. Co., A. H. Lane, Ch. Engr., Baltimore, Md., has under construction 22-ft. wide concrete bridge at west end of No. 5 tunnel, 2 mi. east of West Union.

Contracts Awarded

Ark., Walnut Ridge—Lawrence County, J. C. Childers, Judge, let contract to Jean Brothers, Eaton, for steel bridge across Well's Creek on Ravendon-Opposition Road, at Walker Ford.

Ga., Atlanta—City, I. N. Ragsdale, Mayor, reported, let contract to Brooks-Callaway Co., McGlawn-Bowen Bldg., Atlanta, at \$208,000 to lower railroad tracks preparatory to construction of twin viaducts at South Pryor St. and Central Ave.; S. B. Black, Bridge Engr., 458 Clairmont Ave. 11-10

La., Lake Charles—Louisiana Highway Comn., Frank T. Payne, Chmn., Baton Rouge, let contract to Brown-Abbott Co., Inc., Dallas, at \$32,382, to repair Calcasieu River Bridge near Lake Charles. 11-10

Mo., Joplin—City, Wm. H. Finch, Clk., let contract to Independent Gravel Co., 220 W. Fourth St., at \$6130 to repave Third St. viaduct with bituminous substance.

Oklahoma—State Highway Comn. let contracts for bridges. See Roads, Streets, Paving.

Okla., Guthrie—Logan County Comms. let contract to Boardman & Co., at \$23,460, for bridge across Skeleton Creek, between Lovell and Marshall.

Tenn., Bristol—City, T. J. Bannon, Commr. of Finance, let contract to Alley Construction Co., Bristol, at \$7923, for reinforced concrete bridge over Beaver Creek; Arthur Green, City Engr. 8-18

Va., Norfolk—McClintic-Marshall Co., Pittsburgh, reported, has contract to furnish 2300 tons structural steel for James River Bridge, between Norfolk and Newport News, to be built by James River Bridge Co.; Turner Construction Co., 420 E. Lexington Ave., New York, has contract. 9-22

W. Va., Huntington—State Board of Control, James S. Lakin, Charleston, let contract to James J. Weiler & Sons Iron Works, 202 Elm St., to erect 270-ft. steel bridge on grounds of Huntington State Hospital, connecting kitchen with Women's Pay Patient

building; V. C. Pettit, Archt., Kanawha Natl. Bank Bldg., Charleston, designed bridge.

Canning and Packing Plants

Miss., Picayune—Pearl River Valley Railroad Co., reported, constructing and equipping packing sheds.

Okla., Thackerville—W. C. High, reported, enlarge cannery.

Tex., Troup—I. E. Tackett and Chamber of Commerce, reported, construct canning plant.

Clayworking Plants

Ark., Fort Smith—Hinson China Co., reported, rebuild burned portion of pottery at Fourth and Garrison Sts.

Miss., Yazoo City—John Lear, John P. Bennett, and Associates, reported, interested in organizing company with \$20,000 capital; will erect brick plant.

Coal Mines and Coke Ovens

N. C., Gulf—Gulf Anthracite Coal Co., W. A. Jones, Pres., will develop 1500 acres coal mine, present capacity 4 cars month, plans increasing to 100 tons daily. 11-3

Okla., Poteau—See Electric Light and Power.

Concrete and Cement Plants

Mo., St. Louis—Following sub-contracts awarded for construction \$2,000,000 plant of the Missouri Portland Cement Co., Telephone Bldg., H. L. Block, Pres.: Westinghouse Electric & Mfg. Co., 411 N. Seventh St., East Pittsburgh, Pa., motors and switchboard; Moloney Electric Co., 1149 S. Seventh St., transformers; Chandeyson Electric Co., 4092 Bingham Ave., motor generator sets; Fruin-Colnon Contracting Co., Merchants-Laclede Bldg., concrete foundations and slurry basins; Smith & Brennan Concrete Pile Co., 4000 N. First St., concrete piles; Dixie Machinery Mfg. Co., 3665 Market St., hammer mills; Stephens-Adamson Mfg. Co., Federal Reserve Bank Bldg., rock feeders; R. H. Beaumont Co., 319 Arch St., Philadelphia, Pa.; skip hoists; Pennsylvania Pump & Compressor Co., 3942 W. Pine St., air compressors; Buffalo Forge Co., Chemical Bldg., fans; Traylor Engineering Co., 30 Church St., New York, kiln; Falk Corporation, Milwaukee, Wis., speed reducers; Jeffrey Manufacturing Co., Columbus, Ohio, coal crusher; Richardson Scale Co., Clifton, N. J., automatic scales; Fuller Co., cement pumps; Fuller Lehigh Co., Fullerton, Pa., coal pumps; The Mine and Smelter Supply Co., 42 Broadway, New York, Wellie pumps; F. L. Smith & Co., grinding machinery; John V. Boland Construction Co., Chemical Bldg., concrete chimney; other contracts still to be awarded; plant to be ready for operation by April 1, 1928; F. L. Smith Co., Engr., 50 Church St., New York City. 6-2

Cotton Compresses and Gins

Fla., Crestview—C. F. Manning and E. H. Robinson, reported, plans construction of cotton gin and storage warehouse.

Okla., Altus—Friendship Farmers' Co-Operative Gin Co., capital \$25,000, incorporated; J. M. Conner, T. I. Akins.

Okla., Elk City—Bagwell Gin capital \$40,000, incorporated; J. D. Garnett, H. D. Mansur.

Okla., Elk City—Custer County Gin Co., capital \$20,000, incorporated; J. D. Garnett, Elk City; B. E. Garnett, Stafford.

Okla., Mayfield—Mayfield Gin Co., capital \$30,000, incorporated; J. D. Garnett, Elk City; H. D. Mansur, Elk City.

Okla., Snyder—Farmers Union Co-Operative Gin, capital \$25,000, incorporated; J. D. Erwin, Jack Snyder, Tom J. Johnson, Tipton.

Okla., Sweetwater—Sweetwater Gin Co., incorporated; J. M. Self, J. D. Garnett and H. D. Mansur, both Elk City.

Tex., Corpus Christi—Port Compress Co., Laredo and Eckert Sts., increased capital, \$250,000 to \$350,000.

Tex., DaCosta—Otto Flick, of Planters Gin, Riverside, reported, construct gin.

Tex., El Paso—Fabens Compress and Fumigation Co., capital \$200,000, incorporated; Haymon Krupp, 119 N. Overland St.; Frank T. Pickrell, 3721 Chester St.

Tex., Fabens—Farmers' Island Gin Co., capital \$16,000, incorporated; L. L. Lutich, W. L. Summers.

Tex., Tyler—Hall Bros., reported, rebuild cotton gin burned at loss of \$10,000.

Drainage, Dredging and Irrigation

Ark., Little Rock—F. D. Watkins, Justin Matthews, Commrs. of Drainage Dist. No. 1,

Pulaski County, having surveys made for proposed improvements.

Tex., Edinburg—Mestenas Water Co., S. E. Smith, Pres., Frost Natl. Bank Bldg., San Antonio, plans irrigation system for northeast part Hidalgo County, irrigate about 10,000 acres, plans not completed and contracts not let for several months.

Tex., Lubbock—State Board of Water Engrs., Austin, received application for permit to create Red Bluff Irrigation Dist. to reclaim about 80,000 acres land in Loving, Ward and Reeves Counties.

Tex., Palestine—Geo. Hughes, Palestine, has contract to rebuild drainage system in Trinity River valley, drain 2000 acres for farming. 11-10

Electric Light and Power

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

Alabama—River Falls Power Co., River Falls, reported, granted permission by Alabama Public Service Comm., Montgomery, to build transmission line from Glenwood to Goshen, with distribution station at Goshen. 9-8

Alabama—Following companies have applied to Alabama Public Service Comm., Montgomery, for transmission lines, water plant, etc.: M. C. McAdams, to build transmission line from Millport to Kennedy, in Lamar County; Alabama Water Service Co., Birmingham, to build water plant at Prichard; Alabama Power Co., Birmingham, for transmission line connecting Livingston, Epes, Boligee, Eutaw and Akron with substations and distribution stations.

Ala., Birmingham—City Comsn., reported, expend \$13,500 for whiteway lighting for Fourth Ave., N. from Nineteenth St. to 26th St.

Ala., Eutaw—Alabama Public Service Comm., Montgomery, reported, authorized Gulf Electric Co., 68 St. Francis St., Mobile, to construct distribution line from Atmore to Bay Minette, distance of 20 miles.

Ark., Blytheville—Arkansas-Missouri Power Co., Perry O. Moss, Supt., reported, completed plans for safety loop extending from Manilla to Paragould; cost \$50,000.

Fla., Miami Beach—City receives bids Nov. 30 for white way. See Want Section—Bids Asked.

Ga., Brunswick—Mutual Light and Water Co., reported, install white way on Newcastle St.

Ga., Columbus—Columbus Electric and Power Co., reported, granted authority by State Public Service Comm., Atlanta, to issue \$2,000,000 first mortgage and refunding bonds; proceeds will be used for extensions and betterments; also authorized to increase common stock from 269,000 to 275,000 shares.

Ga., Savannah—Savannah Electric and Power Co., reported, authorized by State Public Service Comm., Atlanta, to sell 250,000 shares of first preferred stock.

Ga., Waynesboro—City ratified sale of plant to Georgia Power Co., Atlanta. 10-20

Kentucky—Kentucky Utilities Co., Starks Bldg., Louisville, reported, expend \$87,300 for construction and extensions; build 18 miles of 11,000 volt transmission line from London to Cumberland, 7½ miles; install 200 kv-a. transformer substation at Cumberland.

La., Crowley—Gulf Public Service Co., A. A. Moresey, Supt., reported, begin construction of third high power line connecting at Eunice with Crowley; 23 miles; \$70,000. 8-18

Md., Baltimore—Consolidated Gas, Electric Light & Power Co., plans issuing \$4,000,000 new series E 5½% cumulative preferred stock.

Missouri—Gasconade River Power Co., reported, applied to Federal Power Comm., Washington, D. C., for preliminary permit to construct dam 95 ft. high on Gasconade River, in Osage, Maries and Phelps Counties, near Rich Fountain, creating reservoir with an area of 17,000 acres, with a 25-ft. draw, providing 360,000 acre ft. of storage capacity; power capacity 4000 h.p.

Mo., Kansas City—Kansas City Power and Light Co. will install 13,200 volt transformer station.

Mo., St. Joseph—City, Louis V. Stigall, Mayor, reported, soon let contract for street lighting and white way system; \$150,000 available.

N. C., Durham—Northwest Carolina Utilities, Inc., chartered; Jones Fuller, 412 E. Main St.; Jno. S. McKee, E. C. Brooks, Jr.

S. C., Edgefield—Town, reported, considering sale of light plant and 30 yr. franchise to Aiken-Augusta Railway & Electric Co., Augusta, Ga.

Okla., Poteau—Lincoln Power Co., David Reid, Pres., 1622 N. A St., reported, started work on \$500,000 power plant, between Howe and Wister on Poteau River, 6 miles from Poteau; develop 6000 h. p. with total capacity of 40,000,000 kw. annually; L. E. Myers Construction Co., 53 W. Jackson Blvd., Chicago, Ill., in charge of construction; 900 acres of coal land will be developed by Lincoln Fuel Co., a subsidiary of Lincoln Power Co.; about all power not used in developing mines will be used by Oklahoma Gas and Electric Co.; power will be available by March 1. 6-30

Texas—Central Power and Light Co., Frost Natl. Bank Bldg., San Antonio, started work on first unit of 2500 h.p. hydro-electric project on Devils River, 165 miles west of San Antonio, 16 miles north of Del Rio and 10 miles above confluence of Devils River with the Rio Grande; will be finished in 8 months; plans call for construction of 2 more units to be located on sites now being inspected by engineers; ultimately develop 6000 to 7000 h. p.; in connection with first unit company will construct 154 miles of transmission lines in Texas; line will connect on north at Val Verde-Crockett counties divisional line, with 60 miles to be constructed by West Texas Utilities Co. of Abilene; Central Power and Light Co., will immediately construct another section of transmission line, 68 miles long, running between Del Rio on west and Uvalde on east; lines now being surveyed; Myers Construction Co. has the contract; entire project, dam and transmission system, is expected to be available for service June 30, 1928; company has purchased and will install at once a 1150 h.p. oil engine, driving an 800 kw. generator in Del Rio plant, will also improve and make extensive additions to switchboard and other auxiliaries; plans for first dam call for structure 45 ft. high and 850 ft. long; of masonry construction and will require 40,000 cu. yds. of material; power house of Spanish type of architecture and built of rubble masonry and reinforced construction; hydraulic and electric equipment will consist of 2500 h.p. unit; reservoir created by initial dam will have area of 630 acres; work on dams 2 and 3 will probably begin before dam No. 1 is completed.

Texas—State Board of Water Engrs., Austin, reported, approved presentation of plan of Texas Gulf Sulphur Co., Gulf, and 41 E. 42d St., New York, for investigating feasibility of constructing reservoir on San Bernard River, in Wharton and Fort Bend counties, for generation of 2000 hydro-static h.p. for production of sulphur in these counties.

Tex., Appleby—Village, reported, petitioned Texas Power & Light Co., Interstate Bldg., Dallas, to install power line.

Tex., Beaumont—Gulf States Utilities Co. increased capital stock from 300,000 shares no par value to 350,000 shares no par value.

Tex., Cuero—Central Power and Light Co., Frost Natl. Bank Bldg., San Antonio, reported, plans improvements in transmission lines over the city; expend \$15,000.

Tex., Fort Worth—City, C. A. Winder, Supervisor of Public Utilities, reported, will let contract on Nov. 22 for 4 white way systems; cost \$64,000.

Tex., Jacksonville—Gulf Public Service Co., New Iberia, La., subsidiary of General Public Utilities Co., reported, securing right of way for transmission line from Jacksonville to Troup, by way of Mount Selman.

Tex., Mansfield—City, reported, install 120 h.p. engine in lighting plant. Address The Mayor.

Tex., Victoria—Central Power and Light Co., Frost National Bank Bldg., San Antonio, reported, completed surveys for high line from Victoria to Port Lavaca; L. E. Myers Construction Co., Contrs., 53 W. Jackson Blvd., Chicago, Ill., and Allen Bldg., Dallas; also construction distribution system at Bloomington.

Va., Hopewell—Frederick Iron and Steel Co., Frederick, Md., reported, has contract for three stokers for power plant of the Atmospheric Nitrogen Corp.'s plant; these stokers were sold by Combustion Engineering Corp., 200 Madison Ave., New York, to Stone & Webster Co., Inc., Boston, Mass., and will be installed at plant of Atmospheric Nitrogen Corp.; each stoker will be 25 by 18 ft. Corp.; each stoker will be 25 by 18 ft., to be used in connection with three cross drum boilers, Babcock & Wilcox Co., 85 Liberty St., New York.

W. Va., Welch—Appalachian Electric Power Co., Bluefield, Va., reported, has contract for street lighting.

Foundry and Machine Plants

Md., Towson—Drills, etc.—Black & Decker Manufacturing Co., Pennsylvania Ave., has preliminary plans for erection of 1-story factory and office building, steel frame, steel sash, stucco finish; cost about \$100,000; Geo. MacKenzie, Archt., 5 Guilford Ave.

Tenn., Nashville—Stoves—W. A. Griswold & Co., W. A. Griswold, Pres., Centennial Blvd., will erect 20x40 ft. and 85x140 ft. additions to plant, metal clad, concrete floors, metal roof. 11-10

Va., Richmond—Continental Motors Corp., 12801 E. Jefferson St., Detroit, Mich., reported, probably establish plant for manufacture of motors for automobiles. Company wires: "Are not interested in establishing plant in Richmond; understand rumor started because of our purchase there of small amount of machinery."

Gas and Oil Enterprises

Ala., Florence—National Gas and Electric Corp., Battle Creek, Mich., reported, acquired Muscle Shoals Gas Co.; plans rebuilding and enlarging distribution system.

Arkansas—Southwestern Gas & Electric Co., 72 W. Adams St., Chicago, Ill., reported, construct transmission lines from Ashdown to Foreman, and from Hugo, Okla., to Wright City; install 5250 kw generating equipment at Texarkana.

D. C., Washington—Leue Oil Co., capital \$200,000, incorporated; Ellwood P. Morey, 717 15th St. N. W.; Harry G. Kimball, 917 W. 15th St. N. W., both Washington; Conrad F. Leue, West Palm Beach.

Florida—Central Florida Gas Corp., Ralph B. Wagner, Pres., granted 30 yr. gas franchise by cities of Winter Haven and Bartow; have plant under construction at Winter Haven.

Fla., Inverness—R. R. Sikes, 211 W. 17th St., Jacksonville, reported, constructing wholesale plant for Gulf Refining Co. on North Pine St.; plant will comprise 3 main buildings, pump house, warehouse and garage and 3 storage tanks of 15,000 gal. capacity each; cost \$15,000.

La., Shreveport—Pima Consolidated Petroleum Co., with offices at Uruia and Shreveport, reported, formed by consolidation of Pima Petroleum Co., Arizona Petroleum Co. and Catalina Petroleum Co.; J. Earl Freeman, Gen. Mgr.

Md., Baltimore—See Electric Light and Power.

Miss., Laurel—F. J. Mordaunt, Union Indemnity Bldg., New Orleans, La., reported, has gas franchise; let contract to A. Garrett, Maritime Bldg., New Orleans, La., for erecting gas plant.

Mo., Joplin—Nancy Oil and Royalty Co., incorporated; N. Wolff, E. H. Wolff, H. W. Blair, 717 Glenview Pl.

Mo., Kansas City—Cass County Gas & Oil Co., capital \$25,000, incorporated; H. A. Johnson, 1401 E. 76th St. Terrace; R. A. Castle.

Mo., Neosho—Neosho Oil Co., capital \$24,000, incorporated; I. F. Burney, Miller; Johnnie Burney, Aurora.

Mo., Poplar Bluff—City, reported, plans voting on granting franchise to Missouri Natural Gas Co.; will construct line from Monroe, La.

Mo., Springfield—Springfield Gas and Electric Co., A. E. Reynolds, V. P. and Gen. Mgr., reported, plans enlarging plant, install additional equipment including boosters, compressors, etc.

N. C., Wilmington—Wilmington Iron Wks., reported, has contract for repairing steel gas generator at gas plant operated by Tidewater Power Co.

Oklahoma—Shell Pipe Line Corp., subsidiary of Shell Union Oil Co., 65 Broadway, New York, reported, soon begin construction of 600 miles of 10-in. pipe line connecting Trans-Pecos fields of Western Texas with main trunk line at Cushing. 11-3

Okla., Cushing—Haskin Drilling Co., capital \$25,000, incorporated; Olin C. Haskin, Leon L. Haskin.

Okla., Muskogee—S. and P. Royalty Co., capital \$25,000, incorporated; Montie Sampson, W. W. Calhoun.

Okla., Oklahoma City—Gold Crown Oil Co., capital \$10,000, incorporated; C. J. Jerome, Oklahoma City; D. W. Sears, Bethany.

Okla., Tulsa—Northern Counties Gas Co., Ponca City (subsidiary of Union Electric Co. of Pennsylvania), reported, acquired gas

rights on 1400 acres in northeastern Grant county.

Texas—Illinois Pipe Line Co., Findlay, Ohio, subsidiary of Ohio Oil Co., reported, construct 10 pumping stations and 10-in. line from Pecos and West Texas fields to Houston Ship Channel.

Texas—National Tube Co., Frick Bldg., Pittsburgh, Pa., reported, has contract for 150,000 tons gas pipe for gas line from Amarillo to Denver, Col., for Public Service Co. of Denver, Col.; line will be built by Prairie Oil and Gas Co., Independence, Kan. E. G. Hill, care of Ford, Bacon & Davis, Inc., 428 Colorado Springs National Bank Bldg., Colorado Springs, Colorado, wires: "Pipe line to be constructed from Amarillo gas fields to Denver, will be 22-in. in diam. from field to Pueblo and 20-in. diam. from Pueblo to Denver; Texas section will be owned by Canadian River Gas Co., and New Mexico and Colorado sections by Colorado Interstate Gas Co.; line being designed and construction supervised by Ford, Bacon & Davis, Inc.; construction contracts awarded yesterday to Williams Bros., Inc., 302 S. Cheyenne St., Tulsa, for New Mexico and Colorado sections; pipe being furnished by National Tube Co., Frick Bldg., Pittsburgh, Pa.; couplings by S. R. Dresser Mfg. Co., Bradford, Pa.; length of main line 341 miles, will be completed Oct. 1; one compressing station 3000 h. p. initial capacity will be constructed at field end of line, to be followed by 3 booster stations of about 5000 h.p.; each located at intervals along line as needed to supply consumer; principal consumers are Colorado Fuel and Iron Co. of Pueblo and Public Service Co., Colorado; which latter company purchases gas wholesale at city gate and distributes in Pueblo and Denver."

Texas, Amarillo—Theodore A. Lelsen, Omaha, Neb., reported, considering construction of gas line from Panhandle gas fields to Omaha and cities en route.

Texas, Brenham—Sun Oil Co., American Exchange Bank Bldg., Dallas, and Finance Bldg., Philadelphia, Pa., reported, develop 9000 acres oil lands.

Texas, Del Rio—Mid-Kansas Oil and Gas Co., Findlay, Ohio, reported, let contract to Mount Cooper Boiler and Iron Works, for 23 additional storage tanks, 80,000 bbl. capacity; construction to begin at once; survey being made for line from Del Rio to San Antonio, to Corpus Christi. 9-15

Texas, Fort Worth—Forest Oil Corp. increased capital to \$110,000.

Texas, Houston—Houtex Oil Co., capital \$60,000, incorporated; S. Minchen, Union Natl. Bank Bldg.; Lawrence Lipper, Post-Dispatch Bldg.

Texas, Livingston—Sunshine Oil Co. increased capital, \$20,000 to \$31,000.

Texas, Odessa—Pure Oil Co., reported, acquired tract for additional buildings.

Texas, Troup—Chamber of Commerce, John T. Flood, Sec., reported, negotiating with Dixie Gas and Fuel Co., Houston, for gas distributing system.

Texas, Wichita Falls—Cruse Production Corp., capital \$15,000, incorporated; W. J. Blake, R. W. Tackett.

Va., Hopewell—City, reported, granted franchise to Old Dominion Gas and Electric Co.; construct gas plant. 11-10

Va., Norton—Central Oil Co., Inc., will erect bulk station, 2 storage tanks of 20,000 gal. capacity, light steel oil house; install pumps, tanks, plumbing. See Want Section—Machinery and Supplies.

Va., Roanoke—Federal Utilities, Inc., reported, acquired Roanoke Gas Light Co., owned by C. H. Giest Co., Packard Bldg., Philadelphia, Pa., including gas and power interests in other States; W. J. McCorkindale, Gen. Mgr.

Ice and Cold-Storage Plants

Ala., Phenix City—Blake Coal & Ice Co., 1104 S. Rail Road St., will erect ice plant, 35x55-ft., brick, concrete floor, built-up composition roof, construction by owner; equipment for complete ice plant installed by Columbus Iron Works Co., Front St., Columbus, Ga.

Fla., Orlando—Florida Public Service Co., 100 E. Central Ave., let contract to Gifford-Wood Co., 50 Church St., New York, for ice conveyor, all erecting work done by Company. 11-3

Mo., Kansas City—Economy Storage & Warehouse Co., capital \$36,000, incorporated; Andrew Smith, Ragtown, Mo.; Howard T. Grubb, 6220 Swope Parkway; Robert L. Pendleton, 4549 Main St.

Texas, Cross Plains—E. J. Roberts, 3600 Hemphill St., Fort Worth, reported, plans

building 30 ton ice plant; cost about \$40,000.

Texas, Fairfield—C. W. Mitchell and associates, Chicago, Ill., reported, plan erecting ice and cold storage plant.

Texas, Quitaque—West Texas Utilities Co., Abilene, Tex., advises, no plans at this time for proposed office building and ice plant, will probably be built in spring of 1928.11-10

Texas, Robstown—Central Power and Light Co., Frost Natl. Bank Bldg., San Antonio, reported, erect all steel ice docking plant, capacity 25 cars, hoisting machinery of enclosed type, electrically driven, plant located on Texas-Mexican Ry. tracks.

Texas, San Antonio—City Ice Co., C. S. Dowley, Mgr., branch of Southland Ice Co. of Dallas, reported, construct 50 ton ice plant at Pleasanton Rd. and Toudouze St. 11-4

Iron and Steel Plants

Texas, Corpus Christi—Alamo Iron Works, 130 Santa Clara St., San Antonio, reported, let contract Nov. 28 for 1 and 2-story and basement, 90x300-ft. warehouse, concrete frame and brick, iron clad; Robt. J. Cummins, Engr., 727 Bankers Mortgage Bldg., Houston. 11-4

Land Development

Ala., Baldwin—H. A. Hayer, Chicago, Ill., reported, acquired 10,000 acres comprising townsite of Muscogee in Escambia and Baldwin Counties; will develop.

Ala., Florence—Bailey Springs Syndicate, S. W. Sparks, Pres., New York, reported, appointed E. G. Holliday, C. J. Early, as committee to plan development of health and recreational resort, including hotel and sanitarium at Bailey Springs; will soon let contracts. 4-28

Ark., Little Rock—Miller Lake and Land Co., capital \$12,000, incorporated; Henry Leigh, 477 E. Markham St.; Justin Matthews, 121 W. Second St.

D. C., Washington—United Greek Catholic Orthodox Cemeteries, Inc., capital \$250,000, chartered; George Wedderburn, Wm. Chanes, Rev. Father W. Gindlin, 1204 I St. N. W.

Florida—Florida Landscaping Co., 606 Dyal Upchurch Bldg., Jacksonville, has contract to landscape filling stations at Ocala, Hampton, New Smyrna, Vero Beach, Melbourne, West Palm Beach and Pensacola for Standard Oil Co., division office, Jacksonville; Chas. L. McIntosh, Landscape Archt., 606 Dyal Upchurch Bldg., Jacksonville.

Fla., Hollywood—Dayton Holding Co., capital \$50,000, incorporated; C. W. Sammons, Wealthy Sammons.

Fla., Jacksonville—Edgewood Properties, Inc., chartered; J. H. Stockton, Guy Marvin, 2550 St. Johns Ave.

Fla., Jacksonville—Saltair Holding Co., incorporated; F. S. Mason, West Bldg.; G. H. Weller, Arlington, Fla.

Fla., Miami—Arthur W. Emmons, Inc., chartered; H. F. Ward, 1311 Alhambra Circle; T. J. Lummus.

Fla., Miami—Southeastern Properties, Inc., chartered; C. E. Holcomb, Y. P. Freeman.

Fla., Miami Beach—Park Side Corp. incorporated; W. T. Miller, 1511 N. W. Ninth St.; O. C. Blohm.

Fla., New Port Richey—Gulf Holding Corp., incorporated; W. E. Burns, J. H. Becker.

Fla., Ormond—Carnell Co., Inc., chartered; Darrell P. Carnell, M. E. Thomson.

Fla., Palm Beach—Clarence H. Geist, Packard Bldg., Philadelphia, Pa., reported, acquired Boca Raton properties of Mizner Development Co.; plans extensive improvements.

Fla., Tampa—Harney Investment Co., capital \$25,000, incorporated; W. H. Toole, 302 Franklin St.; S. W. Toole.

Fla., West Palm Beach—Alfred H. Wagg Organization, S. Olive St., reported, plans expending \$300,000 for improvements to Marion and Marion Park subdivisions; install 8 miles of streets, lights, sidewalks, etc.; Carr & McFadden, Engrs., Guaranty Bldg.

Ga., Thomasville—Dr. C. H. Ferguson, reported, acquired 736 acres between Big and Little Ochocknee Rivers.

La., Lafayette—Billeaud Marsh Land Co., Inc., capital \$30,000, incorporated; Herbert Billeaud, John C. Barry.

La., Shreveport—City, L. E. Thomas, Mayor, plans developing 180 acres for golf course; are surveying site; will erect club house.

Md., Baltimore—Joseph F. Moreland, 5402 Harford Ave., will subdivide 448 acres on Taylor and Oakley Aves.; build gravel road.

Miss., Shelby—Shelby Planting Co., capital

\$100,000, incorporated; G. B. Slocum, H. G. Woodward.

Mo., St. Louis—Karon Realty Co. incorporated; Millard A. Waldham, Edward Platt, both Merchants-Laclede Bldg.

Mo., St. Louis—Ronark Realty & Investment Co., capital \$20,000, incorporated; B. Arenson, E. J. Miller.

N. C., Abbeville—Abbeville Cotton Mills, J. F. Barnwell, Gen. Mgr., is having landscaping improvements to village, including planting of mill grounds, school grounds, etc.; E. S. Draper, Landscape Archt. and Engr., Charlotte, N. C., and Atlanta, Ga., in charge of work.

N. C., Raleigh—North States Sales Co., capital \$100,000, incorporated; J. E. Herring, Tucker Bldg.; M. A. Herring.

Okla., Ardmore—City, created fund of \$10,000 for development of civic center in Central Park. Address The Mayor.

S. C., Greenville—Fallis Realty Co., incorporated; T. A. Honour, Honours; J. Wilbur Hicks, Chamber of Commerce Bldg.

S. C., Williston—Edisto Farms, Inc., capital \$10,000, incorporated; S. E. Black, W. D. Black.

Tex., Austin—Pearl and Fanning Realty Corp. incorporated; Q. C. Taylor, J. Harris Gardner, both Austin Natl. Bank Bldg.

Tex., Bryan—Lasalle Properties, Inc., capital \$10,000, incorporated; R. M. Howell, J. Webb Howell.

Tex., Galveston—Cedar Lawn Co., Clark W. Thompson, Central Natl. Bank Bldg., reported, develop "The Gardens," subdivision; curb and shell streets, install water, sewers, etc.

Tex., Houston—Usener-Gray Realty Co., incorporated; Harold Gray, Dr. J. F. Usener, Queen Bldg.

Tex., Houston—Isaac Hanan, reported, acquired 2200 acres land north of Ship Channel, develop Hanan Estates.

Tex., San Angelo—San Angelo Country Club, Inc., increased capital \$20,000 to \$30,000.

Tex., San Antonio—Arneson-Clark Co., Gunter Bldg., reported, acquired tract on San Pedro Ave.; install water, sewers, gas, electric lights, streets.

Tex., Turkey—C. C. Broyles of Wooldridge Lumber Co., reported, install concrete gutters, curbs and graveled streets.

Va., Cherrydale—Brumback Realty Co., 37 Wilson Blvd., Clarendon, increased capital \$30,000 to \$130,000.

Va., Petersburg—Crater Battlefield Assn., Inc., L. D. Kirkmyer and Arthur James, reported, develop the "Crater" for golf course, 80 acre tract; Fred Finley, Golf and Landscape Archt.

Lumber Enterprises

Arkansas—J. F. McIntyre & Sons, W. Sixth St., Pine Bluff, reported, acquired 1280 acres timber in Cleveland County, will develop.

Fla., Davenport—Davenport Lumber and Supply Co., H. H. Brenner, Pres., increased capital, \$50,000 to \$100,000.

N. C., Asheville—D-P Lumber Co. incorporated; John E. Patton, 19 Fenner Ave.; Marie Patton, both Asheville; M. S. Dillingham, Dillingham, N. C.

S. C., Manning—Lumber Products—Carolina Forests, Inc., capital \$50,000, chartered; C. E. Smith, W. J. Damtoft, G. W. Freeman.

Metal-Working Plants

Md., Baltimore—Tinware—Edward Katzinger Co., Edward Katzinger, Pres., 1949 N. Cicero Ave., Chicago, Ill., acquired plant of August Maag Co., 509 W. Lombard St., now operating; (make bakers, confectioners and ice cream manufacturers tools and utensils); has site at Fleet, Eighth and Ninth St., near Eastern Ave. for probable erection of plant at some future time; will probably be decided about October of next year just what will be done—whether new plant be erected on Fleet St. or another building purchased. 12-30-26

Mo., St. Louis—Adler Metal Products Co., capital \$10,000, incorporated; Jack Adler, 1148 Blackston St.; Joseph Kaiser.

Tex., Houston—L. Seline, 608 Clay St. (operator of tin and sheet-metal works), reported, acquired 100x50-ft. site corner Lee and Jackson St.

Mining

Mo., St. Louis—Consolidated Diamond Corp., capital \$10,000, incorporated; Walter R. Mayne, Bennett C. Clark, both 506 Olive St.

Mo., St. Louis—Denny Road Quarry Co., capital \$20,000, incorporated; H. E. Billman,

Old Warson Rd.; J. W. McCullough, 7615 Carondelet St.

N. C., Asheville—Uwharrie Minerals Co., incorporated; W. L. Harper, Ardmore St.; W. R. Weir, Belews Creek Rd.; Thomas Wilson, all Winston-Salem; has permit for development of Porter gold mine property in Randolph County; Benet Polikoff, Atty., O'Hanlon Bldg., Winston-Salem.

Texas—See Electric Light and Power.

Tex., Alpine—Silver and Lead—Cecil Smith and associates, reported, acquired holdings of the Bird mine; will develop.

Miscellaneous Construction

Mo., St. Louis—Community Mausoleum Co., capital \$25,000, incorporated; R. T. Stephenson, Julius Habenicht, Title Guarantee Bldg.; R. T. Johnson.

Tex., Fort Worth—J. J. Hurley, Ft. Worth Natl. Bank Bldg., Chmn. Riverside Improvement League (temporary organization), interested in constructing subway under railroad at E. Fourth St.

Tex., Georgetown—Dam—Griffith Construction Co. has contract for dam on Middle Gabriel in Georgetown Country Club estate; impound body water about 5 mi. long, and 8 ft. deep.

Va., Norfolk—R. E. Steed, City Clerk, advises: City Council appropriated \$6000 for erection "sand fences" or other plans to prevent erosion of beaches at Willoughby and Ocean View. 11-3

Miscellaneous Enterprises

Ala., Birmingham—City, reported, let contract to American-LaFrance Fire Engine Co., Inc., Elmira, N. Y., for 750 gal. pumper, cost \$12,500; John Taylor, Commr.

Ala., Anniston—Ogletree Construction Co., reported, has contract to remodel building now occupied by Anniston Star and adjacent building for modern newspaper plant.

Ala., Gadsden—City, reported, will probably install additional fire fighting equipment, building new fire station, etc. Address City Clerk.

Ark., Little Rock—Jeffries-Steinkamp Furniture Co., capital \$10,000, incorporated; Ira F. Jeffries, 507 S. Cedar St.; Wm. Steinkamp, Lecy Jeffries.

D. C., Washington—Brown Beverages Corp. incorporated; Benj. P. Fishburne, McGill Bldg., Washington; Jonathan H. Brown, Wilmington, Del.

Florida—Federal Bake Shops, Inc., J. Reed Lane, Pres., Davenport, Iowa, advises: For present we are not considering any radical improvements in our Southern plants; will make some improvements and alterations in all stores in Florida, Georgia and Carolina and are planning some extension in other territory; all expenditures contemplated will be handled by our own working organization. 10-27

Fla., Chipley—Campbell-Butler Hardware Co., capital \$20,000, incorporated; J. D. Campbell, E. D. Butler.

Fla., Clewiston—Celotex Co., B. G. Dahlberg, Pres., 645 N. Michigan Ave., Chicago, Ill., reported, acquired plant of Pennsylvania Sugar Co., Miami, Fla.; probably transfer to Clewiston.

Fla., Fort Myers—Lee County Plumbing & Heating Co., Inc., capital \$10,000, chartered; W. J. Howell, J. P. Maharry, H. G. Maharry.

Fla., Miami—City let contract to American-LaFrance Fire Engine Co., Inc., Elmira, N. Y., for engine and complete fire fighting equipment.

Fla., Sanford—Sanford Drug Co., capital \$10,000, incorporated; L. F. Boyle, S. R. Dighton.

Fla., Stuart—Martin County Growers Assn., reported, plans erecting 30x60-ft. packing plant with 13-ft. loading and unloading platform; leased 40x150-ft. site.

Fla., Tallahassee—Nels Enge, Minneapolis, Minn., reported, interested in establishing plant for manufacture poultry feed.

Fla., Tampa—Florida School Supply Co., incorporated; M. G. Reeves, 1010 Ellamae St.; Mrs. M. G. Reeves.

Fla., Winter Haven—Barrow Pharmacy, Inc., capital \$10,000, chartered; Fred Barrow, T. G. Simmons, Bertie Barrow.

Ga., Atlanta—C. A. Vilas, General Council, National Biscuit Co., 85 Ninth Ave., New York City, advises: "Reports current recently of consolidation with Christie, Brown Company of Canada are without foundation."

Ga., Claxton—Evans County Tobacco Warehouses, Inc., capital \$25,000, chartered; W. M. Herrington, W. D. Holland, A. N. Olliff.

Ga., Columbus—Howard L. Loewenherz and

James C. Ogletree, reported, acquired site on Wynnton Drive; erect \$70,000 laundry building; soon let contract.

Ga., Columbus—Columbus Dairy Co., R. L. Cooper, Pres., Third Ave. and Seventeenth St., reported, purchased building (now occupied by dairy company); will remodel, install additional machinery, including complete gravity system for handling milk and cream.

Ga., Columbus—Columbus Coca Cola Bottling Co., reported, acquired site on Third Ave.

La., Baton Rouge—Louisiana Bread Co., Inc., chartered; Thomas B. Dupree, 601 Boyd Ave.; W. K. Correll, A. D. Parker.

La., Bogalusa—H. C. Cowgill has contract for clearing site on Avenue Q south of Fourth St. for erection new factory building of Bogalusa Paper Co., Fourth St. 10-27

La., Hammond—Mercantile—Jitney Jungle Frain Co., Inc., capital \$15,000, chartered; J. P. Frain, Kokomo, Miss.; M. C. Frain, Hammond; W. A. Wood, 4624 St. Rock St., New Orleans.

La., Jennings—Geo. V. Brower, reported, plans establishing cream receiving station.

La., New Orleans—Handy Andy Community Stores of La., Inc., increased capital to \$100,000.

La., New Orleans—Bodlow Cafeteria, Inc., 718 Gravier St., expended \$35,000 on improvements, equipment furnished by Albert Pick & Co., 212 W. Randolph St., Chicago, Ill.; W. R. Coulter, Archt., 6500 Catina St. 10-20

La., New Orleans—Crescent City Moss Co., Inc., capital \$16,527, chartered; Dr. W. E. Levy, 7320 St. Charles St.; Mrs. Bertha K. Stern, 5339 St. Charles Ave.

La., New Orleans—Bugs—Douglas Public Service Corp., Jay Well, V-Pres., 118 N. Front St., has plans and specifications for building to be erected at South Front and Thalia St.; 2-story, heavy mill construction, sprinkler system, steam heat; has site 112x175 ft.; building will occupy portion of square on which Appalachian unit is located at present; will be leased by Werthan Bag Co., 1200 Clinton St., Nashville, Tenn., which plans establishing factory and salesrooms in New Orleans.

La., New Roads—Merchandise—LaBlanc Co., Store, Inc., capital \$15,000, chartered; Gasner LeBlanc, A. A. Vignes, Leonce P. LeBlanc.

La., New Orleans—Interstate Wholesale Grocers, Inc., 426 S. Peters St., increased capital to \$600,000.

La., Shreveport—Central Market, Inc., capital \$10,000, chartered; J. H. Lebo, 218 Rutherford St., Mrs. Bertie Lebo, Minnie M. Lebo.

La., White Castle—Syrup, etc.—Cora-Texas Co., Inc., chartered; Leon Kessler, White Castle; Walter J. Folse, 8121 Elm St., New Orleans.

Md., Baltimore—Security Storage Co., Inc., to be presently formed, will contract to purchase entire assets of the storage dept. of Security Storage & Trust Co., consisting of combined real estate and modern warehouse building at 11-21 W. North Ave., hauling equipment, machinery, accounts receivable, etc.; entire properties of Enterprise Carpet Cleaning & Storage Co., 3126 Frederick Ave.; are offering \$150,000 6 1/4% cumulative preferred stock, par value \$100, through Harris, Mooney & Co., Keyser Bldg. Security Storage Buildings, 11-21 W. North Ave. (Security Storage Co., Inc.) offering \$350,000 first mortgage of 6% sinking fund gold bonds (closed mortgage) through the Century Trust Co. of Baltimore. 11-10

Md., Baltimore—International Paint Corp., East St. Louis, Ill., will probably begin erection of plant on Colgate Creek and Pennsylvania R. R. next spring; C. R. Sutter in charge of local operations. 9-22

Md., Takoma Park—Superior Saw Co., Inc., capital \$50,000, incorporated; Conrad Schmidt, Benton R. Rowell, J. W. Grant.

Md., Baltimore—Grain and Seed—Goldsbrough Brothers, Inc., 206 Chamber of Commerce Bldg., chartered; Louis P. Goldsbrough, 35 W. Preston St.; Anna G. Tapley.

Md., Baltimore—Druggist—Hynson, Westcott & Dunning, Charles and Chase St., acquired property 1026 N. Charles St., reported, plan erecting addition to laboratory; Mottu & White, Archts., 527 N. Charles St.

Md., Baltimore—Metal Beds, Springs, Mattresses—Lehigh-Bernstein Manufacturing Corp., Allentown, Pa., leased warehouse 747 W. Pratt St., containing about 8,000 sq. ft. floor space, use for offices, warehouse and show rooms.

Md., Baltimore—Rudd Manufacturing Co., 29th and Smallman Sts., Pittsburgh, Pa., leased first floor and basement of building at

1212 N. Charles; will erect 1-story shop building in rear.

Md., Salisbury—Publishing—Little Journeys, Inc., chartered; Walter C. Thurston, Clarence W. Whealton.

Md., Salisbury—Physicians & Surgeons Supply Co., Dr. J. F. Hogan, Pres.-Mgr., Philadelphia, Pa., reported, plans moving laboratories and headquarters to Salisbury.

Mo., Raytown—Economy Storage & Warehouse Co., capital \$36,000, incorporated; Andrew Smith, Robert L. Pendleton, Howard L. Grubb.

Md., St. Michaels—St. Michaels Products and Printing Co. incorporated; Paul F. Bilger, C. Eugene Harrison, Robt. L. Seth.

Md., Wayside—Potomac Transportation Corp., capital \$75,000, chartered; Wm. W. Werback, Chas. M. Mundle, both Washington, D. C.; Richard P. Hutchins, Wayside.

Miss., Biloxi—Bay View Crushing Co. incorporated; B. Taltavull, W. L. Guice, J. S. Whetstone.

Miss., Hazlehurst—Brookhaven Creamery Co., Inc., W. H. Becker, Mgr., Brookhaven, will erect 40x60-ft. plant, brick, concrete floors, built-up roof, construction by owner; install \$15,000 refrigerating machinery and general equipment for handling milk, furnished by Creamery Package Mfg. Co., 61 W. Kinzie St., Chicago, Ill.; Mojonier Bros. Co., 4001 W. Ohio St., Chicago, Ill.; Chas. Denny, Inc., 524 Magazine St., New Orleans, La.; electric light and power from R. P. Applewhite, Brookhaven; plumbing, M. Berger, Brookhaven; use steam from boiler room for running plant; J. Howard Ryan, Archt., Summit, Miss.; J. H. Noble, Const. Engr., Brookhaven. 11-3

Miss., Houston—Chickasaw Dairy Co., reported, close contract with Kraft Cheese Co., 402 Rush St., Chicago, Ill., to establish cheese plant.

Miss., Philadelphia—Ivey Peebles, J. F. McCauley and associates interested in establishing whole milk plant; R. L. Butler, Neshoba County Agent.

Miss., Tupelo—Borden Fish Lake Co., incorporated; J. T. Borden, J. R. Horton, John R. Anderson.

Miss., Water Valley—H. K. Hunter, Trustees of the Yalobusha Milk Products Co., receiving bids for erection brick building to be used for cheese factory; plans and specifications at office Graft Cheese Co., 402 Rush St., Chicago, Ill. 9-29

Mo., Anglum—Commercial Advertising—Robertson Flying Service, Inc., chartered; Wm. B. Robertson, 40 Kingsbury Place, St. Louis; Frank H. Robertson, 6629 Clayton St., Clayton.

Mo., Hannibal—Waybill Printing Co. incorporated; Eugene B. Poole, Zeno G. Klene, Neva Poole.

Mo., Kansas City—National Radio and Electrical Sales Co., Inc., capital \$25,000, chartered; E. E. Thomas, Jr., M. D. Walters, 7227 Washington St.; Henry Chick, Jr., 317 Bryant Bldg.

Mo., Kansas City—Royal Coffee Co., Inc., capital \$10,000, chartered; Dave J. Klefer, 6018 Paseo St.; A. H. Mack, 1308 E. 36th St.; A. H. Roemer.

Mo., Kansas City—Lok-Box Co., incorporated; Leo T. Schwartz, L. L. Kerchner; manufacture boxes and box material.

Mo., Kansas City—Bar-Rusto Corp., Robert M. McCandlish, Pres., 1808 Locust St., leased building, 1808 Locust St.; has Udyllite process for rust proofing iron and steel, also department for chromium plating.

Mo., Kansas City—Royal Coffee Co., Inc., 2303 E. 15th St., capital \$10,000, incorporated; Dave J. Klefer, 6018 Paseo St.; A. H. Mack, 1308 E. 36th St.

Mo., Kansas City—Cartlich Advertising Service Co., capital \$50,000, incorporated; Raymond M. Havens, Newbern Hotel; Gladys H. Havens, Streeter Blair, 2 E. 45th St.

Mo., Kansas City—Hamilton Wholesale Drug Co., 1801 Wyandotte St., increased capital, \$50,000 to \$150,000.

Mo., Kansas City—Merchandise—Chintz Shop, Inc., 3718 Broadway, capital \$10,000, chartered; Lucy G. Drage, Wm. L. Butler, 611 E. 47th St.; Ethel Guy.

Mo., Kansas City—City, reported, proposes expending \$7,500,000 on traffic ways and signals; H. F. McElroy, Mgr. See Financial News—Bond Issues Proposed.

Mo., Moberly—Wrapping and Crating Materials—Shepard Mfg. Co., capital \$23,000, incorporated; Wm. A. Shepard, F. E. Rasling.

Mo., St. Louis—Merger of eight Middle Western Biscuit Companies with the United Biscuit Co., K. F. MacLellan, Pres., as nucleus, reported, merger involves the United

Biscuit Co., main office Chicago, with plant at St. Louis; Sawyer Biscuit Co., Chicago, Ill.; Lakeside Biscuit Co., Toledo, Ohio; all subsidiaries of the United Biscuit Co.; the Felber Biscuit Co., Columbus, Ohio; Streitman Biscuit Co., Cincinnati, Ohio; Manchester Biscuit Co., Sioux Falls, S. D.; Merchants Biscuit Co., Denver, Col., and the Chicago Carton Co., also included; combination to be called United Biscuit of America; transaction will be financed by issuance by the new company of \$4,000,000 of 6% debenture bonds, \$2,000,000 of 7% cumulative convertible preferred 323,000 shares common stock.

Mo., St. Louis—Laundry—Specialty Curtain & Linen Co., 1055 Hodiamont Ave., incorporated; George R. Matthieu, 1213 Shawmut Pl.; Nellie Matthieu, 1214 Shawmut Pl.

Mo., St. Louis—Safety Locks—Conway Equipment Co., incorporated; Leo J. Cotton, Dave Berlin.

Mo., St. Louis—An ordinance prepared by Roy C. Gans, Ch. Engr., Dept. of Streets and Sewers, in connection with proposed \$5,000,000 manufacturing plant for General Electric Co., has been submitted to company's main office at Schenectady, N. Y., and if approved ordinance will be placed promptly before Board of Aldermen; it is reported construction of plant on 115 acre site at Bircher St. and Goodfellow Ave. will begin as soon as plans can be prepared after passage of ordinance. 10-13

Mo., St. Louis—Merchandise—R. G. Julow & Co., Inc., capital \$10,000, chartered; John F. Karbe, 6711 Marquette St.; R. G. Julow, 519 Newport St.; D. Marshall, 3973 W. Belle St.

Mo., St. Louis—Cirrito Candy and Sales Co., 517 Clark Ave., capital \$10,000, incorporated; J. B. Cirrito, Guy R. Cirrito, Henry W. Forker, all 4305 Pine Blvd.

Mo., St. Louis—Star Dyeing & Cleaning Co., 2515 N. Grand Blvd., reported, has permit for \$60,000 structure, replacing tornado wrecked building; 91x74 ft., reinforced concrete and brick construction, terra cotta and stone trim; F. A. Ludewig, Archt., 3115 S. Grand St.

Mo., St. Louis—Battle Chemical Co., 4026 Olive St., reported, let contract to A. G. Nolan Construction Co., 6543 Bartmer Ave., for factory addition; 2-story, 40x50 ft., brick, built-up roof, steel sash, plate glass, cement floors; cost about \$20,000; Bonsack & Pearce, Archts., 411 Olive St. 10-27

Mo., St. Louis—Patent Rights—Devices Development Corp., capital \$50,000, incorporated; H. J. Kratzer, 5314 Maple St.; H. G. Fletcher, 6749 Page St.; Earl G. Broeg, Arcade Bldg.

Mo., St. Louis—Atlas Window Cleaning Co. incorporated; Morris Vittert, 3609 Ridge St.; Alvin B. Vittert.

Mo., St. Louis—Plumbing—N. O. Nelson Manufacturing Co., Louis D. Lawlin, Pres., Tenth and Chestnut Sts., reported, plans building factory and office adjacent to warehouse at Boyle Ave. and Duncan St.; cost about \$300,000; Company wires: "Report of our building operations premature, there will be nothing doing for some time."

Mo., St. Louis—Medicinal Chemicals—Monsanto Chemical Works, John F. Queeny, Pres., offering \$2,000,000 first (closed) mortgage 5½% sinking fund gold bonds through A. G. Becker & Co., Mark C. Steinberg & Co., Lafayette South Side Bank of St. Louis; proceeds will be used in retirement of the company's 7% first mortgage bonds, now outstanding in the principal amount of \$2,239,200; company's plant located in St. Louis and Monsanto, Ill.; former plant consists of 28 modern buildings, occupy about 3 city blocks and latter plants consist of 50 buildings located on about 196 acre site; also owns 50% interest in Graesser-Monsanto Chemical Works, Ltd., an English company, specializing in manufacture of heavy chemicals, large producer of phenol (carbolic acid) and cresylic acid.

Mo., St. Louis—Cloth and Metal Specialties—Perfection Manufacturing Co., J. A. Eberle, Pres., 221 Joy Ave., Webster Groves, reported, rebuild 3-story factory corner Lefingwell and Montgomery; cost about \$20,000; recently damaged.

Mo., St. Louis—Volland Scenic Studios, Inc., Rose Volland, Sec., 3731 Cass Ave., reported, contemplates rebuilding factory, recently damaged.

Mo., St. Louis—Johnson, Stephens & Shinkle Shoe Co., Chas. B. Spalsbury, Sec., 4242 Laclede Ave., reported, contemplate rebuilding plant recently damaged.

Mo., St. Louis—St. Louis Heating Co., Walter Wimmer, Pres., 2901 Elliott St., reported, rebuild factory recently damaged.

Mo., St. Louis—Boston Wall Paper Co., incorporated; S. W. Scott, Chas. E. Smith, Maisie E. Smith.

Mo., Springfield—Davis Candy Co., capital \$150,000, incorporated; J. F. Davis, 456 E. Madison St.; H. A. Jerberg, Chas. W. Morrow, 605 E. Page.

Mo., Springfield—John Sand & Son, reported, acquired plant of Whistle Bottling Co., 415 W. Pershing Way; will remodel and operate.

Mo., Vandalia—Ely & Walker Dry Goods Co., 1520 Washington St., St. Louis, Mo., reported, plans construction garment factory; employ about 300 persons.

N. C., Charlotte—Sodawich, Inc., capital \$20,000, chartered; J. P. Little, Jr., 400 Queens Rd., M. P. V. P. Loftis, Latta, Arcade, N. M. Sharp.

N. C., Charlotte—Mercantile—H. H. Spurrer & Co., Inc., capital \$100,000, chartered; R. H. Spurrer, 11 E. Third St.; W. S. Atkinson, T. E. Rea, 1900 Dilworth Rd. W.

N. C., Charlotte—Five Points Drug Co., capital \$25,000, incorporated; T. W. Kendrick, 10 S. Church St.; J. C. Cardell, Mrs. Bertha L. Kendrick.

N. C., Dilworth Sta., Charlotte—Tipton Saw Manufacturing Co., capital \$50,000, incorporated; F. T. Tipton, R. E. Moore, reported, erect building cor. Templeton and S. Boulevard; 1 story, 50x97 ft.

N. C., Durham—Toilet Articles—Superior Products Co., capital \$40,000, incorporated; G. B. Cheek, 205 Broadway St.; C. T. Cheek, T. T. Pickett.

N. C., Durham—City, reported, contemplates purchasing additional fire fighting equipment; R. W. Riggsby, City Mgr.

N. C., Kinston—J. B. Dawson, publisher of New Bernian and Sun-Journal, New Bern, N. C., reported, acquired controlling interest in Kinston News Leader; will publish.

N. C., Monroe—City Council, reported, plans installing traffic signal lights.

N. C., Reidsville—American Tobacco Co., Chas. A. Penn, V.-Pres., will erect cigarette factory to double present capacity; 7-story and basement, 82x250-ft., brick and reinforced concrete, wood and concrete floors, built-up roof, steam heat; receive bids Nov. 18; J. E. Sirrine & Co., Engrs., Greenville, S. C.; bidders are: Grier-Lowrance, Statesville; Burns-Hammond Construction Co., Walter Kidde & Co., both Jefferson Bldg.; Angle-Blackford Co., American Exchange Bank Bldg., all Greensboro; Brown-Harry Co., E. Main St., Gastonia; Wise Granite & Construction Co., American Exchange Bank Bldg., Richmond; Gallivan Building Co., Gallivan Bldg.; Fiske-Carter Constructing Co., Masonic Temple Bldg.; Potter-Shackelford Co., McAllen Bldg., all Greenville; Southeastern Construction Co., 210 W. Second St.; T. C. Thompson & Bros., 609 N. Smith St., both Charlotte. 10-13

N. C., Selma—Merchandise—Poole & Roberts Co., capital \$25,000, incorporated; W. H. Pooler, Jr., W. L. Robert, Mrs. Geneva Poole.

N. C., Winston-Salem—Taylor Brothers, 308 E. First St., reported, has permit to erect tobacco storage shed on Belevs St., 30x99 ft., 1 story, brick and mill construction.

Okla., Clinton—Clinton Plumbing Supply Co. incorporated; L. C. Thornbrough, Lottie Thornbrough.

Okla., Cushing—Cushing Community Hotel Corp., capital \$241,000, incorporated; T. J. Hughes, E. J. Blank, John W. Wilson.

Okla., Medford—L. R. Van Sant, reported, will erect 20,000 poultry house, 50x150 ft., brick, with unloading docks adjoining building on each side; install modern equipment; capacity of poultry compartment about 50,000 lbs. poultry at one time; E. Steadlin, Contr.

Okla., Oklahoma City—Cain Coffee Co. has permit for \$50,000 building, 512 W. Second St.

Okla., Sand Springs—Dr. Otto V. Martin and W. H. Colvin, Jr., 39 S. La Salle St., Chicago, Ill., reported, acquired plan of Sand Springs Chemical Co., operate under "Martin process" specialize in reclamation of various chemicals from oil fields brines, expend from \$350,000 to \$1,000,000 on improvements and new equipment; W. H. Colvin advises have purchased interest in Sand Springs Chemical Co.; there will be no engineers employed and no large contracts awarded.

Okla., Tulsa—City plans bond issue for additional fire-fighting equipment; Herman F. Newblock, Mayor. See Financial News—Bond Issues Proposed.

Okla., Tulsa—Southwestern Cut Stone Corp., capital \$50,000, chartered; E. L. Jones, 434 S. College St.; P. N. Landa, L. J. Collins.

S. C., Aiken—Branch & Smith, 334 Walker

St., Augusta, Ga., have contract to remodel building of Aiken Coca Cola Bottling Plant; brick front, reinforced concrete floor, metal sash windows, plate glass.

S. C., Greenville—Nox Glare Shield Co. incorporated; H. H. Irwin, McCullough Heights; W. A. Carpenter, J. C. Haley, 662 S. Main St.; manufacture glass shields for automobiles.

Tenn., Knoxville—Southern Landscape Planners, incorporated; N. B. Wilkinson, J. B. McCalla, 709 Market St.; A. G. Lowe.

Tenn., Madisonville—Carnation Milk Products Co., Oconomowoc, Wis., reported, considering establishing plant.

Tenn., Memphis—Sunlight Produce Co., subsidiary of Cudahy Packing Co., 111 W. Monroe St., Chicago, Ill., reported, leased building, 92 W. Iowa St., Crenshaw Station; plans establishing creamery; machinery all purchased.

Tenn., Nashville—Nashville Buttermilk Co., 700 Nineteenth St., increased capital, \$25,000 to \$50,000.

Tenn., Nashville—Royal Vending Co., 836 Fourth Ave., incorporated; A. T. Wofford, O. T. Reynolds, 2120 Capers Ave., P. C. Sadler.

Tenn., Paris—Paris Candy Co., 220 W. Austin St., let contract to King & Moore, Paris, for erecting 48x165-ft. plant; wood, composition roof, wood floors; install \$9000 equipment.

Tenn., Paris—L. M. Vandever of Murfreesboro, reported, interested in proposed expansion of plant of Henry County Creamery; increase output to approximately 1,000,000 lbs. butter annually; tentative plans call for expenditure of \$30,000.

Tenn., Union City—Phenix Cheese Co., 345 Greenwich St., New York City, reported, plans establishing plant.

Tex., Bryan—LaSalle Hotel Co., capital \$50,000, incorporated; Dupree Fountain, J. F. B. Hawcliffe, D. W. Cooley.

Tex., Cisco—Lake Cisco Amusement Co. increased capital, \$15,000 to \$50,000.

Tex., Corpus Christi—W. E. Pope, care of Corpus Christi Times, reported, plans erecting office and printing plant, 8 story, brick and tile, reinforced concrete, fireproof; E. Kenneth Ahler, Archt., State National Bank Bldg.

Tex., Dallas—Dawn Rose Doll Novelty Co., incorporated; J. W. King, 607 N. Montclair St.; Margaret Webster, Charles L. Webster.

Tex., Dallas—Texas Cotton Export Co., Cotton Exchange Bldg., increased capital, \$10,000 to \$25,000.

Tex., Dallas—Moore Wall Paper & Paint Co., incorporated; J. P. Moore, 5420 Miller St.; M. Pils.

Tex., Elena—Tyrell-Garth Bros. of Beaumont and Elena, reported, plan erecting fig preserving plant at Highland Farms; acquired additional acreage; have 550 acres planted in figs and additional 150 acres being planted.

Tex., Fort Worth—Financial Publishing Co., capital \$25,000, incorporated; J. M. McGreevy, B. Windell, C. R. Hansen, 3145 Travis St.

Tex., Galveston—City, J. E. Pearce, Mayor, interested in purchase additional water-front fire-fighting facilities.

Tex., Galveston—Piggly Wiggly Evans Co., capital \$75,000, incorporated; C. P. Evans, 2927 0 1/2 St.; Fay Evans, Edwin W. Pitesch.

Tex., Galveston—Fire Fighting Equipment—City votes Dec. 12 on \$200,000 bonds for purchase modern fire boat; J. E. Pearce, Mayor. See Financial News—Bond Issues Proposed.

Tex., Galveston—Perfecto Cleaning & Dyeing Co., reported, has permit for erection 1-story building, 2811 Fannin St.; reinforced concrete, cost about \$13,000.

Tex., Houston—Iroquois Electric Refrigerators, Inc., increased capital, \$5000 to \$20,000.

Tex., Houston—Williams Building and Development Co., capital \$10,000, incorporated; E. J. Williams, 2004 Milam St.; E. J. Coombs, L. V. Williams.

Tex., Houston—Houstonian Cleaners and Dyers, Inc., capital \$20,500, chartered; H. B. Springfield, 2120 High St.; H. O. Morgan, 120 W. 16th St.; R. P. Basin.

Tex., Houston—Southern Bag & Burlap Co. increased capital, \$31,000 to \$76,500.

Tex., Houston—Steamship Agents, etc.—S. Sgitcovich & Co., 302 Cotton Exchange Bldg., capital \$50,000, incorporated; J. A. Hickey, Houston; Stephen F. Hancock, A. B. Shoemaker, 3724 P 1/2 St., both Galveston.

Tex., McAllen—Faraklas Building Co. in-

corporated; Tom Faraklas, R. M. Bounds, Thelma Clark.

Tex., Midland—Construction—Robson Co. of Texas, capital \$10,000, incorporated; A. Newton Robson, John Raymond Marquis, Jean Robson.

Tex., Mineral Wells—Mineral Solids Co., capital \$50,000, incorporated; G. B. Dewitt, Jack Harris.

Tex., Plainview—Irick Construction Co., capital \$50,000, incorporated; Roy Irick, P. O. Owens, A. B. Deloach.

Tex., Port Arthur—Port Arthur Undertaking Co., capital \$10,000, incorporated; N. B. Hampton, 428 Procter St.; E. K. Salles.

Tex., San Angelo—Snowwhite Creameries, E. E. Bradford and Leo Gandy, Mgrs., remodel plant and install equipment for making butter.

Tex., San Angelo—Medicated Stock Salt, Tonics, etc.—Texas Stockmens Supply Co., H. O. Byrd, Mgr., 134 E. Avenue B, let contract to Will O. Connel at \$16,800 to erect 50x156-ft., 2-story plant, at Orient Tracks, concrete brick and tile, concrete and wood floors, Johns-Manville roof; install mixing machines, vats, kettles, scales, trucks, etc.; equipment all purchased; Dwight Dill, Engr., Dallas; Swartz & Hamberling, Archt., San Angelo. 11-3

Tex., San Antonio—Clothing—Bell Manufacturing Co., 140 Lakeview, has permit for erection factory at Lakeview and Concho St., concrete and tile; Aug. Fuesel, Contr., 1903 Virginia Blvd.

Tex., San Benito—Stonewall Jackson Hotel Corp., capital \$55,000, chartered; Fred H. Scherr, John T. Lomax, Lynn B. Milan.

Tex., Slaton—Slaton Hardware Co., capital \$15,000, incorporated; A. G. Taggart, Mayme Taggart, Mrs. Hattie Hodges.

Tex., Vernon—F. E. Eggleston, reported, has permit for erection \$15,000 warehouse on N. Main St. for Vernon Meat Co.

Tex., Wichita Falls—M. Johnson, reported, has permit for \$100,000 chicken ranch west of Westmoreland addition.

Va., Fall Church—West End Market, Inc., capital \$25,000, chartered; Herbert Nelson Hirst, Ella E. Hirst, Ruth E. Hirst.

Va., Hopewell—See Electric Light and Power Plant.

Va., Pulaski—Kraft Cheese Co., 402 Rush St., Chicago, Ill., reported, contemplates establishing plant.

W. Va., Philippi—Myers Remedy Co. offering 200 shares 8% first preferred stock (par \$50,000) through Wm. G. Hopper & Co., 115 S. Third St., Philadelphia, Pa.; proceeds from sale will be used for additional equipment, working capital and similar corporate purposes.

W. Va., Wheeling—Negotiations, reported, under way for formation of United-Sterling Co. to combine the United Drug Co., Greenleaf and Lion Sts., Boston, Mass., and Sterling Products, Inc., Wheeling; if approved, the United Drug Co. will handle the merchandising and sales, and Sterling Products to handle the manufacturing and distribution for both concerns; Sterling Products operates plants in Wheeling, W. Va., and Windsor, Ontario, and controls plants in Rensselaer, N. Y., Burlington, Vt., Stamford, Conn., and Montreal.

Motor Bus Lines and Terminals

La., Baton Rouge—Teche Transportation Co., Inc., Franklin, La., reported, let contract to L. W. Eaton, 1601 N. Boulevard, Baton Rouge, for new terminal building on North Blvd., 1 story, 64x160 ft., brick, steel sash, composition roof, concrete floors; estimated cost \$25,000. 9-15

Va., Richmond—Sandstron Railway Co., Oliver J. Sands, Pres., applied for permit to operate passenger bus service between Richmond and Seven Pines via Williamsburg road.

Motor Cars, Garages, Filling Stations

Ark., Fort Smith—Pierce Oil Corp., 300 S. Third St., reported, plans erecting filling station at 1801 Rogers Ave.

Ark., Ft. Smith—William Jones, has permit for erection gasoline filling station at N. Eleventh and Sprading Ave.

D. C., Washington—Motor Sales & Service Co., capital \$50,000, chartered; Harold F. Coates, 33 New York Ave. N. E.; Elizabeth M. Michael, Lyla M. Coates.

Fla., Miami—City Comn. soon receive bids for first unit of municipal garage at N. W. Twentieth St. and Tenth St., cost about \$60,000; Ernest Cotton, Director Public Service.

Fla., Stuart—St. Lucie Motors, Inc., Earl J. Ricon, has garage and show room; install general shop equipment, cost about \$10,000. See Want Section—Machinery and Supplies. 11-10

Ga., Atlanta—General Motors Corp., Detroit, Mich. and 224 W. Fifty-seventh St., New York City, reported, receives bids Nov. 18 for construction Chevrolet assembly plant at Sawtell St. and McDonough Rd., total cost \$2,500,000; bidders are: The John W. Cowper Co., Smith & Williams, Foundation Co., Turner Construction Co., Southern Ferro Construction Co., Griffin Construction Co., S. J. Krebs Co., C. A. D. Bayley Co., D. D. Thomas & Son, all Atlanta, Ga.; D. D. Thomas & Son, Memphis, Tenn.; Claussen-Lawrence Co., Augusta, Ga.; Fred T. Ley & Co., Jacksonville, Fla.; A. C. Samford, Montgomery, Ala.; W. P. Thurston Co., Richmond, Va.; H. K. Ferguson, Cleveland, Ohio; Rust Engineering Co., Pittsburgh, Pa.; Ferro Concrete Co. and Max Tenker & Son, both Cincinnati, Ohio; Gamble Construction Co. and Baumes-McDevitt, both St. Louis, Mo. Albert Kahn, Inc., Archt., 1004 Marquette Bldg., Detroit, Indiana Bridge Co., Muncie, Ind., reported, has contract to furnish structural steel (2250 tons, estimated) for new Chevrolet building to be erected on McDonough Rd. by General Motors Corp., Detroit, Mich., and 224 W. Fifty-seventh St., New York City; Nichols Contracting Co., 1281 La France St., Atlanta, Ga., has contract for excavating 200,000 yds. 10-13

La., Baton Rouge—Landry-Knox Motor Co., Inc., capital \$24,000, chartered; Percy A. Landry, 232 Ninth St.; John H. Moorman, 628 N. Boulevard; Wm. N. Knox, 385 Greaves St.

Md., Baltimore—Sellmayer Packing Co., 531 S. Third St., erect 1-story garage cor. Fleet and Fourth Sts.; plans by George Sellmayer, 522 S. Third St.

Mo., Albany—Albany Motor Co., capital \$10,000, incorporated; Clay Wolfe, George Possati.

Md., Baltimore—Guilford Motors, Inc., 4401 York Rd., incorporated; Carroll D. Wetherly, 109 W. North Ave.; Robert C. Calder.

Mo., Kansas City—General Springs Co., incorporated; Herbert J. Moore, 116 E. 70th St.; John A. Marcason.

Mo., Kansas City—Kansas City Tire and Supply Co., capital \$10,000, incorporated; Alva C. Terrell, 400 E. 43rd St.; P. K. Scott, R. G. Lindsay, 621 Everett St.

Mo., Kansas City—Empire Garage Co., 2904 McGee St., has permit for \$20,000 garage, 1109 Wyandotte St., 1-story, 75x142-ft., brick concrete and steel; R. B. Rutledge, Contr., 3608 Charlotte St.

Mo., St. Joseph—Burger Motor Co., 1800 Frederick Ave., reported, let contract for erection \$25,000 garage and sales rooms, Frederick Ave., Colhoun and Twentieth St.; 80x70 ft., 1 story; Eckel & Aldrich, Archts., Corby Bldg.

Mo., St. Louis—Mitchellette Motor Co. increased capital, \$15,000 to \$35,000.

Mo., St. Louis—Central Star Sales Co., capital \$75,000, incorporated; Earl W. Ferris, James S. Cody, Mary B. Meehan, all 2929 Locust St.

Mo., St. Louis—Garage Service Co., Inc., 5 N. Euclid Ave., capital \$25,000, chartered; Thomas P. Stoney, David Stoney, J. H. Schueddig.

Mo., St. Louis—Black and White Rent-a-Car Co., Inc., capital \$25,000; Clarence J. Haines, 3623 Washington St.; Ray Moss.

Okla., Oklahoma City—C. E. Huffman, 21 E. Sixth St., has permit for \$17,000 public garage.

Okla., Oklahoma City—G. A. Nichols Realty Co., 20th and Santa Fe Sts., reported, leased 160x162 1/2-ft. site at Tenth St. and Robinson Ave.; erect building, portion of which will be occupied by Elsie Motor Co.; J. A. Elsie, Pres.; A. L. Christenberry, Archt., 1804 N. Broadway.

Okla., Tulsa—Pure White Dairy Co., 901 W. Third St., has permit for garage at 220 S. Maybelle Ave.

S. C., Greenville—Jones & Trott, Inc., Archts., Woodside Bldg., reported, drawing plans for proposed automobile storage warehouse in rear of Poinsett Hotel; 100x100 ft., 2-story; erected by Woodside Interests; probably leased by E. S. Toohy and associates.

Tenn., Nashville—Square Auto Accessories and Radio Co., capital \$10,000, incorporated; Millard E. Wyatt, 507 Fatherland St.; Mrs. Catherine Hager, H. E. Matthews.

Tenn., Nashville—Davidson County Board

of Highway Commra., reported, approved plans for construction \$125,000 garage and supply depot at Fifth and Hitt Sts., East Nashville; steel, fireproof construction; greater portion side walls glass; receive bids Nov. 25; Asmus & Clark, Archts., Nashville.

Tex., Alice—Bennett & Nayer, E. Main St., will erect \$10,000 garage and sales room, 64x71 ft., concrete tile, stucco and timber, concrete floor, built-up roof; construction by owner; Hardy & Curran, Archts., 709 Nixon Bldg., Corpus Christi. 11-10

Tex., Beeville—Smith-Wood Nash Co., incorporated; J. C. Wood, Pat H. Smith, Sam H. Smith.

Tex., Beeville—Homer Botts has contract for erection 1-story, hollow tile and stucco filling station; Mrs. E. M. Dugat, owner; Will N. Noonan Co., Archts., Builders Exchange Bldg.

Tex., Childress—Norris-Williams Chevrolet Co., capital \$20,000, incorporated; R. H. Norris, R. L. Williams, J. H. Hankins.

Tex., Dallas—E. W. Morton, Jefferson Hotel, reported, has permit for \$25,000 garage, 1016 Jackson St., 2-story, brick, reinforced concrete and tile; W. Scott Dunne, Archt.; W. H. King, Contr.

Tex., Dickinson—Joe Salvato, reported, construct \$10,000 filling station and amusement building.

Tex., Houston—J. W. Northrop, Jr., Archt., West Bldg., reported, has plans for addition to building at 1312 Polk Ave.; 1 story, 50x80 ft., hollow tile, brick and steel construction; owned by J. L. Jones, Cotton Exchange Bldg.; to be occupied by Batterson Fire Truck Co., 1216 McKinney St.

Tex., Houston—Universal Terminal Warehouse Co., Samuel P. Fleming, V. Pres.-Gen. Mgr., 1006 Washington St., reported, acquired site in 1300 block on Bingham St.; to erect garage building to house company's fleet trucks; cost about \$15,000.

Tex., Houston—Lenox Garage, Inc., capital \$10,000, chartered; T. D. Dinsmoor, R. R. Conner, C. G. Winn.

Tex., Raymondville—Joe Turner, reported, erect garage and filling station; concrete and tile; cost about \$10,000.

Tex., San Antonio—Pierce Petroleum Co., 1704 Locust St., St. Louis, Mo., reported, plans building 4 filling stations; 1 story with extended roof, hollow tile, stucco, concrete foundation and drives; L. Harrington Co., Archts., Builders Exchange Bldg.

Tex., San Antonio—F. C. Davis, Brady Bldg., let contract to W. N. Hogg, 312 Navarro St., at \$30,000, for factory and sales building to be occupied by Standard Electric Co., 113 San Pedro St., 1-story, 84x156-ft., brick and concrete, gravel roof, concrete floor; cost about \$30,000; address equipment proposals to Standard Electric Co., 115 San Pedro Ave. 11-10

Tex., San Antonio—Wm. O. Reiden & Bros., 1801 W. Commerce St., let contract to Moeller & Weilbacher, 1211 Willow St., at \$17,525 for tire and service station, 1-story, brick and reinforced concrete; Harvey P. Smith, Archt., Nat'l Bank of Commerce Bldg. 10-27

Tex., San Antonio—Dr. T. T. Parker, Soledad St., reported, erect 1-story garage building; reinforced concrete, hollow tile and stucco, cost about \$20,000; receive bids about Nov. 18; Will N. Noonan Co., Archt., Builders Exchange Bldg.

Va., Roanoke—Camel City Coach Co. of Virginia incorporated; John L. Gilmer, Cascade Ave.; C. T. Leinbach, 476 S. Main St.; W. G. Tenelle, 619 Summit St., all Winston-Salem, N. C.

Railway Shops and Terminals

Mo., Trenton—Chicago, Rock Island and Pacific R. R. Co., C. A. Morse, Ch. Engr., Chicago, Ill., reported, contemplates building extension to roundhouse. Engineer of Buildings advises work on proposed extension of roundhouse has been deferred until some time next year.

Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Proposed Construction

Alabama—State Highway Comm., Woolsey Finnell, Highway Director, Montgomery, receives bids Nov. 29 for road and 4 culverts; Houston County—17.62 mi. road, from Do-

than to Columbia, 167,256 cu. yd. excavation, 62,000 sand clay surfacing; Russell County—4 concrete culverts, between Marvyn and Society Hill; 16,000 lb. deformed bar reinforcement; plans on file; W. A. McCalla, State Highway Engr.

Ala., Anniston—Calhoun County Commrs. plan 3 roads: Horse Block Mountain Road; Bankhead Highway to Birmingham, through Pell City; road to Gadsden.

Ala., Birmingham—City Comm., Eunice Hewes, Clk., plans expending \$70,950 to pave Fifth St., Fifteenth Ave. and Woodlawn Road; A. J. Hawkins, City Engr.

Ala., Birmingham—City, Eunice Hewes, Clk., plans widening South Seventh St., 50 to 80 ft., from Seventh to Tenth Ave.; A. J. Hawkins, City Engr.

Ala., Selma—City receives bids Nov. 18 for 5100 sq. yd. Kentucky rock asphalt pavement on 5-in. concrete base, 1200 cu. yd. excavation on King St.; plans from City Clk.; W. O. Crisman, City Engr.

Ark., Conway—City Commrs. will let contract Nov. 18 for concrete pavement on Faulkner St., College Ave. to Prince St.; Glenn D. Douglass, Engr., Home Insurance Bldg., Little Rock.

Ark., Fort Smith—City Commrs. plan paving in Paving Dist. No. 42; Will D. O'Shea, Dist. Engr.

Ark., Harrisburg—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, plans graveling 4 mi. State Highway, east of Harrisburg, Poinsett County across ridge on Harrisburg and Marked Tree Road; O. L. Hemphill, State Highway Engr.

Ark., Paragould—State Highway Dept., Dwight H. Blackwood, Chmn., Little Rock, plans concreting highway from Paragould to Harrisburg; O. L. Hemphill, State Highway Engr.

Ark., Pine Bluff—City formed Paving Dist., including 15 blocks, in East Pine Bluff; will pave East Seventeenth or Harding Ave., from Georgia to Ohio St. and Georgia St., from Seventeenth to Nineteenth Ave.; estimated cost \$100,000; Frank R. Allen, City Engr.

Ark., Searcy—State Highway Comm., Dwight H. Blackwood, Chmn., Little Rock, plans expending \$500,000 to build and improve roads in White County, including link of road from Memphis to Little Rock; O. L. Hemphill, State Highway Engr.

Fla., DeLand—Board of Commissioners, Halifax-St. Johns River Road and Bridge Dist., Volusia County, Charles F. Burgman, Chmn., plans Daytona Beach-Ocala Highway, from Daytona Beach to Ocala; cost \$1,350,000. See Financial News—Bond Issues Proposed. 10-13

Fla., DeLand—Volusia County Commrs. plan State Road No. 4 through Fourth Dist. See Financial News—Bond Issues Proposed.

Fla., Gainesville—Alachua County, Special Road and Bridge Dist. No. 1, Commrs., plan 2½-mi. road from State Highway No. 14 toward Alachua sink; 66-ft. wide standard dirt graded.

Fla., Jacksonville—Duval County Commrs., Frank Brown, Clk., receive bids Dec. 1 for 8.5 mi. Road No. 38, Dunn Ave., from Kings Road to Main Street road; 5,000 cu. yd. excavation, 90,000 lin. ft. inverted curb or header, or concrete curb, 100 tons reconstructed base, cold patch or shell, 79,800 sq. yd. bituminous surfaces, alternate; plans F. M. Edwards, County Engr.; W. F. Belote, Chmn.

Fla., Stuart—City, Ralph E. Mahr, Mgr., plans paving, curbing and guttering Belle Flora Ave.; plans opening Oseola through to Palm Beach Road; 10-ft., parkway in middle of street, 19-ft. paved on each side, 5-ft. sidewalk on each side.

Fla., Tampa—City Comm., W. Lesley Brown, Mgr., receives bids soon to pave 20,000 yd. on Michigan Ave., from Campobello Ave. to Fortieth St., cost \$80,000; 5000 yd. Central Ave., Broad to Hanlon St., cost \$20,000; plans paving Tenth Ave. from Twenty-third to Fortieth St.; R. E. Cason, Supt. of Streets.

Ga., Atlanta—City, I. N. Ragsdale, Mayor, plans paving 7 streets and avenues: West Andrews Drive, Muscogee Ave., Grand Ave.

Ga., Waycross—Ware County Commrs. plan completing 3 roads: Waycross-Brunswick road to county line; Waycross-Pearson road to county line; county's portion of original Central Dixie Highway.

Ky., Glasgow—State Highway Comm., Frankfort, receives bids Nov. 22 for 5.382 mi. grade and drain Glasgow-Burkesville road, from end of Federal Aid Project No. 116, near Elbow Springs Station, to Metcalf County line; 24 ft. wide on fills, 28 ft. in cuts; 47,649 cu. yd. excavation and borrow, 117,860 lb. reinforcing steel; plans on file, from E. N. Todd, State Highway Engr., and Dist. Engr.

Ky., Hazard—Perry County Commrs. plan building and rebuilding public roads; cost \$500,000. See Financial News—Bond Issues Proposed. 10-13

Ky., Owensboro—Road Dept. of Davidson County, R. T. McFarland, County Judge, will build cross-county roads, including 12-mi. bank gravel Lyddane Bridge Road, from Henderson Road to Windy Hollow section; 3 mi. road from Leitchfield Road, northward to connect Leitchfield Road with Hardinsburg Road; extend Utica Road from Graveyard Hill to McLean County line.

Louisiana—State Highway Comm., Frank T. Payne, Chmn., Baton Rouge, receives bids Dec. 8, to furnish gravel and build 2 roads: Franklin Parish—17.577 mi. from pavement on Front St., Winnsboro, through Fort Necessity to point near Boeuf River; Sabine Parish—6.921 mi. Many-Zwolle-Converse-DeSoto Parish line Highway, from point east of Noble to gravel road, under construction, east of Converse; plans on file; Nicholls W. Bowden, State Highway Engr.

Louisiana—State Highway Chmn., Frank T. Payne, Chmn., Baton Rouge, receives bids Dec. 22, for grading and drainage structures on 2 roads in East Feliciana Parish: 13.19 mi. Clinton-Bluff Creek road, from Plank road, south east of Clinton, through Bluff Creek, and intersects Baton Rouge-Greensburg Highway, south west of Amite River Bridge; 1.778 mi. Baton Rouge-Greensburg road, from East Baton Rouge, East Feliciana Parish line to west bank of Amite River; plans on file; Nicholls W. Bowden, State Highway Engr.

Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, received low bids for road and road embankment: St. Tammany Parish—2.154 mi. embankment on Chef Menteur Highway, from northeast end of Rigolets Bridge to intersection with present gravel road south of Salt Bayou, Gulf Coast Dredging Co., Galveston, \$111,771, for hydraulic method; McWilliams Dredging Co., Carondelet Bldg., New Orleans, \$213,560, for work with clam shell dredges; Natchitoches Parish—7.120 mi. Creston-Saline Highway, from end of State gravel road at Bienville-Natchitoches Parish line to Chestnut; H. E. Machen, Winnfield, La., \$52,037. 10-13

La., Baton Rouge—East Baton Rouge Parish Police Jury, F. A. Woods, Sec., received low bid from Jones Contracting Co., at \$28,126 to hard surface .65 mi. Weller Ave., Third Ward, from Standard Oil gates to Plank road.

La., Benton—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, receives bids Dec. 15 for 12.935 mi. 20-ft. Bossier City—Arkana Highway, Bossier Parish, from point on Shreveport-Minden Highway, about 1 mi. east of Red River Bridge, through Brownlee and Vanceville to Fifth St., Benton; 2-in. Warrentine bitulithic, 2-in. bituminous concrete, modified Topeka type, 2½-in. sheet asphalt wearing surface on 7-5-7-in. concrete base, 1-2½-5 concrete, reinforced concrete pavement, 8-6-8-in., of 1-2-3½ concrete; plans on file; Nicholls W. Bowden, State Highway Engr.

La., Covington—City, W. M. Poole, Mayor, plans letting contract in Jan. for \$75,000 street improvement; A. D. Mindgier, Engr.

La., Covington—Town, W. M. Poole, Mayor, plans full-width paving on Columbia Street, Boston to Cemetery; 20-ft. across top, from cemetery on; A. D. Mindgier, Engr.

La., Plaquemine—Mayor and Board of Aldermen receive bids Nov. 21, for 7,575 sq. yd. concrete sidewalks, 1,700 sq. yd. driveway, 19,000 lin. ft. curb and gutter, 3,500 ft. 4-in. drains; plans from Swanson-McGraw, Inc., Const. Engr., Balter Bldg., New Orleans.

La., Shreveport—City, S. G. Wolfe, Sec. Treas., receives bids Nov. 22 to pave 3 avenues, including Exposition, Woodland and Carrie; plans from City Engr.

La., Springville—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, receives bids Dec. 22 to furnish gravel and build 6.057 mi. Albany-Hammond Cut-off Highway, Livingstone and Tangopahoa Parishes, from gravel road at Albany to west end of Thomas St., at Hammond city limits; plans on file; Nicholls W. Bowden, State Highway Engr.

Maryland—State Roads Comm., Baltimore, receives bids Nov. 22 for 2 roads: Washington County—1.5 mi. concrete shoulders along Cearfoss Pike between Cearfoss and Hagerstown, Cont. W-26; Anne Arundel County—1.2 mi. gravel from end of Cont. AA-47 to Deale, Cont. AA-48; plans on file; John N. Mackall, Chmn.; L. H. Stewart, Sec.

Md., Baltimore—City, Board of Awards, receives bids Nov. 23 to grade, curb and pave with 11,000 sq. yd. sheet asphalt on concrete base, streets in Cont. No. 441; plans on file;

Nathan L. Smith, Highways Engr.; C. F. Goob, Ch. Engr.; Wm. F. Broening, Mayor.

Md., Baltimore—City, Wm. F. Broening, Mayor, plans paving Federal St. with sheet asphalt, from Gay St. to Luzerne Ave.; Nathan L. Smith, Highways Engr.; C. F. Goob, Ch. Engr.

Md., Brunswick—City plans re-surfacing New York Hill road, with tarvia and stone chips. Address City Clk.

Miss., Blue Mountain—City, A. N. Donnell, Clk., receives bids Dec. 2 to grade and gravel streets, 3372 cu. yd. excavation; 2471 cu. yd. gravel; plans on file.

Miss., Brookhaven—City, Perry A. Coker, Clk., receives bids Nov. 22 for 22,300 sq. yd. 2-in. Warrenite bitulithic pavement on North Jackson, Congress, Davis Fore, Chickasas St.; plans on file and from City Engr. 11-10

Miss., Gulfport—City, Mayor and Board of Aldermen plan improving 9 streets and avenues, including Woodward Ave., Eighth St.; James A. Barksdale, Engr., Public Works.

Miss., Hazlehurst—City, Board of Aldermen, plans paving with concrete or asphalt Estelle St. and West Railroad Avenue; plans paving residential streets; Massena L. Culley, Const. Engr., New First Natl. Bank Bldg., Jackson, Miss. 10-27

Miss., McComb—City, H. M. Drane, Clk., receives bids Dec. 6 for 2 1/2 mi. concrete sidewalks; plans on file; W. H. Black, Mayor.

Miss., New Albany—Union County plans 75 mi. roads; cost \$100,000. Address Board of Supvrs.

Miss., Pontotoc—Pontotoc County plans graveling and surfacing 4 roads: Complete Bankhead Highway west to Lafayette County line near Toccopola; gravel highway from Pontotoc south towards Houston to Chickasaw County line near Houlika; surface Pontotoc-Oklahoma Highway via Troy; gravel road north through Cherry Creek; \$600,000 available.

Mo., Greenfield—Dade County Commrs. plan extending Sac Valley Highway through county from Green, Dade and Polk Counties' line to point southeast of Cane Hill at Cedar County line, via Dadeville.

Mo., Independence—Jackson County Commissioners plan road building; cost \$6,500,000. See Financial News—Bond Issues Proposed.

Mo., Jefferson City—City, C. B. Steer, Clk., plans grading, curbing, guttering and paving with penetration bituminous macadam 3 streets and alley, including Hamlin, Center.

Mo., Joplin—City, Maud E. Foss, Clk., plans paving Grand Ave. from Nineteenth to Twenty-second St.; Sixth St. with Class F macadam, from Patterson to Florida Ave.

Mo., Joplin—City, Maud E. Foss, Clk., plans paving Nineteenth St. from Connor Ave., with one course concrete. S. P. Ashcraft, City Engr.

Mo., Kansas City—City, H. F. McElroy, Mgr., plans improving Pershing Road; cost \$500,000. See Financial News—Bond Issues Proposed.

N. C., Fayetteville—State Highway Comm., Raleigh, plans improving State Highway No. 53, Greensboro-Fayetteville road; building concrete bridge over Lock's Creek east of Cape Fear River Bridge, on Highway No. 24; Lester Ames, Ch. Highway Engr.

N. C., Wentworth—State Highway Comm., Raleigh, will let contract in Dec. for surfacing 4-mi. road between Leaksville and Virginia line, south of Ridgeway; J. Elwood Cox, Fifth Dist., State Road Commr.

Okla., Ada—Pontotoc County plans 25 mi. road from Ada to Allen; B. C. Herbert, County Engr.

Okla., Ada—City Commrs. received low bid from Frye Brothers & Chilcutt to pave 5 blocks on East Fourteenth St.; may pave South Johnston Ave.; Somer Jones, Mayor. 11-3

Okla., Alva—Woods County plans paving State Highways No. 64, 49 and 15, and graveling roads to county trade center; cost \$850,000. Address County Clk. See Financial News—Bond Issues Proposed.

Okla., Ardmore—State Highway Dept., Oklahoma City, and Carter County, M. T. Pierce, County Commr., plan 4 mi. hard-surfaced road from Stephens County line to connect with State Highway No. 29; Clark R. Mandigo, State Highway Engr.

Okla., El Reno—City, R. W. Fassett, Mgr., plans receiving bids for 1/2 mile, 30 ft. paving on West Russell St.; grading and curbing; estimated cost \$23,530.

Okla., Frederick—Tillman County Good

Roads Committee, plans 3 concrete roads, totaling 59 mi.; total cost \$1,770,000. Address County Commrs. See Financial News—Bond Issues Proposed 10-20

Okla., Oklahoma City—City, E. M. Fry, Mgr., plans opening North Broadway, cost \$285,000; B. M. Hart, Engr. See Financial News—Bond Issues Proposed.

Okla., Tulsa—City Comm., J. G. Whiteside, Finance Commr., approved plans for 16 blocks of paving, widening 2 streets and paving 3 alleys, estimated cost \$114,198.

S. C., Anderson—City, Mayor Fant, considering surface treatment 10 mi. streets.

S. C., Camden—City, W. H. Halle, Clk., receives bids Nov. 22 to pave certain streets with sheet asphalt. Warrenite bitulithic, asphaltic concrete, rock asphalt, cement concrete or other permanent types with sewers, catch basins, etc.; concrete sidewalks and driveways; plans on file and from Loughlin Engineering Co., Camden; C. P. DuBose, Mayor.

S. C., Charleston—Charleston County Sanitary and Drainage Comm. receives bids soon for 6 mi. asphalt topping on 4 roads: 1 1/2 mi. Wappoo Drive road, from Polly Island road, James Island, to Stone River road; 1 1/4 mi. road from concrete highway to Meggett; 2 mi. rifle range on Mount Pleasant; 1 1/4 mi. Montague and Durant Ave. North Charleston.

S. C., Greenville—Greenville County Commrs. considering paving Jones Ave. from Augusta road to city limits; city plans paving Jones Ave. from municipal limits to Cleveland Street bridge. Address City Clk.

S. C., Greenville—Greenville County plans improving Simpsonville to Anderson Road. Address County Commrs.

S. C., Orangeburg—Orangeburg County Commissioners considering 22-mi. hard surface, Highway No. 9, from Orangeburg to Lexington County line. See Financial News—Bond Issues Proposed.

S. C., Spartanburg—Spartanburg County Highway Comm. plans improving 2 mi. road between Clifton and Gore's Church.

Tenn., Charlotte—Dickson County Court voted \$230,000 bonds to be used by State to rebuild Highway No. 48; State Highway Dept. will let contract. 11-10

Tenn., Chattanooga—City, R. H. Crox, Commr. of Streets and Sewers, plans extending Market St. to Twenty-third; widening Seventeenth and Sixteenth St. between Long and Rossville Ave.; Twenty-third, from Long to Rossville Blvd.; Ninth St., Chestnut to Park Ave.

Tenn., Dover—Stewart County and State Highway Dept., C. N. Bass, Ch. Highway Commr., Nashville, considering highway between Dover and Tennessee River.

Tenn., Huntington—Carroll County Commrs. plan road building, cost \$250,000. See Financial News—Bond Issues Proposed.

Tenn., Huntington—Carroll County Quarterly Court appropriated \$178,000 for surveying and grading county link of Austin Peay Highway, from McKenzie to Atwood Ave., Trezevant.

Tenn., Knoxville—City, Charlton Karns, Mgr., receives bids last of Nov. or Dec. 1 for paving and highway improvement: Paving, sidewalks, curbs and water lines, Freemason, between Farragut and Fairfax; improve north side of Terrace, between Mountcastle and Twenty-first St.; pave Twenty-first, between West Cumberland and Terrace Ave.; pave Lake, between Twenty-second and Twenty-third; paving and water line extensions, Laurel, between Nineteenth and Twenty-second; pave Cecil, between Broadway and Fourth; improve Raleigh, between Broadway and Yarmouth; sidewalk and curb on Oakland, McCalla to Lansing Ave.; sidewalk and curb, Lansing, between Oakland and Fern; paving, sanitary sewers, water lines, Speedway, between Fern and Carson; sidewalk and curb Crawford, between Lakeside and Lot No. 14, Ramsey's Addition; storm sewer for Sequoyah Hill Drainage Dist.

Tenn., Mountain City—Johnson County Commrs. plan road from Mountain City to Johnson, connecting at Elizabethton with Johnson City-Asheville link of Appalachian Scenic Highway; cost \$270,000. See Financial News—Bond Issues Proposed.

Tenn., Mountain City—Johnson County Commrs. plan road from Mountain City to Elizabethton; cost \$150,000. See Financial News—Bond Issues Proposed. 10-27

Tenn., Paris—Henry County plans Austin Peay Highway, connecting Paris with eastern section of county and terminating at site of bridge to be constructed across Tennessee River near Mouth Sandy; 18-ft. wide permanent foundation, hard-surface top; may receive bids after March 1. Address County Commrs.

Tenn., Ripley—Lauderdale County, George W. Young, Judge, plans roads to serve rural districts, and cross 2 main trunk lines; cost \$1,000,000. See Financial News—Bond Issues Proposed.

Tenn., Shelbyville—Dept. of Highways and Public Works, C. N. Bass, Ch. Highway Commr., Nashville, plans building highway, via Wartrace-to-Shelbyville pike, to connect with Dixie Highway at some point east; C. L. Shoffner, Shelbyville, in charge of grading and graveling, under construction.

Tenn., Wartburg—Morgan County plans completing Cincinnati-Lookout Air Line road through county, cost \$238,000. Address County Commrs. See Financial News—Bond Issues Proposed.

Tex., Albany—Shackelford County, Richard Dyess, Judge, plans 13.12 mi. bituminous mixed caliche and stone surface, Highway No. 18, from end of Federal Aid Project No. 477-D to Jones County line; Jas. E. Perie, Engr.

Tex., Archer City—Archer County, H. V. Pearson, Judge, plans 8.978 mi. grading and bridges, Highway No. 79, from Sta. 494 plus 00 to Wichita County line; estimated cost \$32,338; bridge over 20-ft. span; Guy R. Johnston, Engr.

Tex., Arlington—City Comm. plans street paving, cost \$40,000. See Financial News—Bond Issues Proposed.

Tex., Austin—Travis County, Geo. S. Mathews, Judge, plans 4.849 mi. grading and bridges, Highway No. 20, Austin-Houston road, from Manor toward Austin; estimated cost \$65,000; also several large concrete bridge structures; J. E. Motheral, Res. Engr.

Tex., Belleville—Austin County, C. D. Duncan, Judge, plans 9.16 mi. reinforced concrete, Bates' type, 18-ft. Highway No. 36 from Fort Bend County line to northwest line of Road Dist. No. 3; Herbert Schroeter, Engr.

Tex., Canyon—Randall County, B. F. Fronabarger, Judge, plans 5.522 mi. grading and bridges, Highway No. 9, from Canyon north; R. E. Dyatt, Engr.

Tex., Claremont—Kent County, H. W. Davis, Judge, plans 22.467 mi. grading and bridges, Highway No. 84, from Claremont to Fisher County line; estimated cost \$124,500; Nagle-Rollins-Witt-Gilchrist, Engrs., Allen Bldg., Dallas.

Tex., Coldsprings—San Jacinto County, M. McMurray, Judge, plans .553 mi. grading and bridges, Highway No. 45-A, from Coldsprings to Walker County line at Waverly; estimated cost \$47,150; several bridge structures; D. K. Caldwell, Engr.

Tex., Corsicana—Navarro County Commrs. Court plans road building in Road Dist. No. 2 adjoining Consolidated Road Dist. No. 1, and extending to Richland Creek, 3 1/2 mi. east of Dawson. See Financial News—Bond Issues Proposed. 10-13

Tex., Decatur—Wise County, Carl Faith, Judge, plans 6.050 mi. grading and bridges, Highway No. 39, Sandy Creek to Decatur, estimated cost \$40,000; O. W. Hlenn, Engr.

Tex., Eastland—Eastland County, Ed. S. Pritchard, County Judge, plans completing 9 roads: Paving highway from Comanche County line to Gorman; paving link through Gorman; paving road through Carbon; retopping highway from Carbon to Eastland; highway from Eastland through Desdemonia to Stephensville; from Carbon, through Okra to Rising Star; retopping Homney-Rising Star Road; Highway No. 23, northwest of Cisco; pave 1 mi. road west of Ranger on Pleasant Grove Road; improve Bankhead Highway; J. B. Early, Div. Engr.

Tex., Edinburg—Hidalgo County Commrs. plan road building in Road Dist. No. 1; cost \$4,000,000. See Financial News—Bond Issues Proposed. 10-20

Tex., El Paso—El Paso County, E. B. McClintock, County Judge, plans Carlsbad-Cavern Road, via Pow Wow Canyon; Fred Wilson, County Engr. See Financial News—Bond Issues Proposed.

Tex., Fort Worth—City, O. E. Carr, Mgr., plans widening Eighth Ave. to 45 ft. to Clark St.; to 36 ft. from Clark St.

Tex., Groesbeck—Limestone County, H. F. Kirby, Judge, plans 7.490 mi. concrete and asphalt Highway No. 14 from Freestone County line south to Mexico, and north to Navasota River; C. L. Willeford, Engr., Mex. ia.

Tex., Graham—Young County, W. F. Parsley, Judge, plans 1.545 mi. grading and bridges, Highway No. 79, from Olney to Archer County line; Guy R. Johnston, Engr.

Tex., Houston—City, George Woods, Mgr., plans extending Gray St. to intersect Calhoun, Jefferson and Heiner or Sabine St.; J. C. McVea, City Engr. See Financial News—Bond Issues Proposed.

Tex., Houston—City, George Woods, Mgr., plans opening Eagle St., and paving crossing over S. A. and A. P. tracks, between La Branch and Crawford St.; J. C. McVea, City Engr.

Tex., Houston—Harris County, Norman Atkinson, Judge, plans 10,324 mi. grading and bridges, Highway No. 6, Galveston-Houston Highway, from South Houston to Webster; A. J. Wise, Engr.

Tex., Houston—Harris County, H. L. Washburn, County Auditor, receives bids Dec. 1 for topping Market Street Road, from San Jacinto River to Goose Creek St.; Norman Atkinson, County Judge.

Tex., Jasper—State Highway Dept., R. S. Sterling, Chmn., Austin, considering resurfacing Highway No. 63; R. A. Thompson, State Highway Engr.

Tex., Kermit—T. B. Wagner, Amarillo, reported, will expend \$100,000 to build 15-mi. air line asphalt surfaced road from Wickert into Hendricks oil pool of Winkler County.

Tex., Llano—City plans additional paving in business section. Address City Clk.

Tex., Madisonville—Madison County Commissioners plan hard surfacing State Highway No. 21 and Federal Highway No. 75; highways from Dallas to San Antonio, and Nacogdoches to San Antonio; cost \$800,000. See Financial News—Issues Proposed. 9-29

Tex., Port Arthur—City Comm. granted permit to S. W. Clarke, U. S. Government Engr., to build road from Austin Ave. to north bank of Sabine-Neches ship channel, opposite Government dikes, and place bulkheads in storm protection levee at point where road and levee meet.

Tex., Raymondville—Willacy County plans forming Lyford Road Dist. and building road. Address County Commrs. See Financial News—Bond Issues Proposed.

Tex., Richmond—State Highway Comm., R. Sterling, Chmn., Austin, receives bids Nov. 28 for 10.14 mi. ½-in. inverted penetration asphaltic treatment, State Highway No. 19, Fort Bend County, from county line to county line, 103,832 sq. yd.; R. A. Thompson, State Highway Engr.

Tex., San Antonio—City Comm., Paul E. Steffler, Commr. of Streets, plans extending Elm St., Nolan to East Houston St.; I. Ewig, City Engr.

Tex., Sherman—City Comm. plans paving Broughton St., from College to city limits.

Tex., Sonora—State Highway Comm., R. S. Sterling, Chmn., Austin, plans improving 3 roads in Sutton County: Surface Old Spanish Trail to Kimble County line; 8 mi. caliche and gravel road between Sonora and Pecos River; road to Osona and to Pecos River; R. A. Thompson, State Highway Engr.

Tex., Sterling City—Sterling County plans hard surfacing 3¾ mi. Highway No. 9, through county. Address County Commrs. See Financial News—Bond Issues Proposed.

Tex., Sweetwater—Nolan County, A. S. Mauzey, Judge, plans 3.783 mi. gravel surface, 2½-in. bituminous macadam top, Highway No. 70, Fisher County line to Sweetwater; estimated cost \$89,500; S. C. Dougherty, Engr.

Virginia—State Highway Comm., H. G. Shirley, Chmn., Richmond, received low bids for 5 roads: Dinwiddie-Nottaway Counties—4.9 mi. soil, Route 10, from point east of Blackston, C. S. Luck & Son, Inc., 1617 Brook Rd., Richmond, \$22,844; Allegheny County—2.7 mi. grading and drainage, Route 14, from point west of Covington, Central Constructing Co., Victoria, \$28,124; Rappahannock County—6 mi. grade and drainage, Route 21, from Massies Corner, Central Constructing Co., \$12,687; Henry County—7.18 mi. concrete, Route 33, from Ridgeway, Ford & Harvey, Lynchburg, \$30,400; Madison and Greene Counties—about 1 mi. grading and drainage, Route 28, south of Rapidan River, Hall & Mitchell, Keswick, \$7395. 11-3

Va., Lexington—Rockbridge County, F. C. Davis, County Supr. of Highways, plans 8 mi. grading and draining Midland Trail, Highway No. 14, west of Lexington; also 4 mi. section to Rockbridge County line.

Va., Richmond—City, R. Keith Compton, Director of Public Works, considering curbing, guttering and graveling Bainbridge St., Twenty-fourth to Thirtieth St.; plans widening street to 36 ft., 10-ft. sidewalks; \$15,000 appropriated.

Contracts Awarded

Ala., Birmingham—City, Eunice Hewes, Clk., let contracts totaling \$185,339, to pave 12 streets and avenues, including Graymont Ave., Fiftieth St.; H. N. Bowdry, Southern Roads Co., Pioneer Bldg., Morgan Hill Paving Co., Woodward Bldg., Independent Paving Co., American Trust Bldg.; Dunn Con-

struction Co., Chamber of Commerce Bldg.; Concrete Service Co. and J. L. Mullarky, 2400 Ave. J; A. J. Hawkins, City Engr.

Ga., Brunswick—McDonald Construction Co., Marble Arcade Bldg., Lakeland, Fla., has contract to hard surface 36 blocks on Long Island Drive, St. Simons Island.

Ga., Jesup—City let contract to Atlantic Bitulithic Co., Washington, to pave 3 blocks on Cherry St.

Ky., Paducah—City, J. N. Bailey, Mayor, let contract to Frazier & Cocke to grade and gravel Wheeler Ave. and A St.

Ky., Pikeville—Pike County Fiscal Court let contract to J. D. Hackney Construction Co., McAndrews, Ky., at \$60,000 to grade and drain 3 roads: On Shelby Creek, from Mayo Trail, up Indian Creek to Floyd County line; on Johns Creek 4.5 mi. up Johns Creek, connecting with Pikeville-Williamson Highway at Bent Branch; 1.5 mi. road adjacent to mouth of Sycamore at Guinare, Ky.; John W. Pruitt, County Judge.

La., Baton Rouge—East Baton Rouge Parish Police Jury, F. A. Woods, Sec., let contract to James Contracting Co., Louisiana National Bank Bldg., at \$28,126, for 35,000 ft., .665 mi., 24-ft. 5-in. concrete base, 2-in. black top, modified Topeka paving. 10-13

Missouri—State Highway Dept., Jefferson City, let contracts for 6 roads: Macon County—2.19 mi., Route 36 and 1.016 mi. Route 63, 18-ft. concrete, Excelsior Springs Co., Excelsior Springs; Maries County—18.884 mi. 18-ft. gravel, Route 63, Lahar Bros., Springfield; Macon County—1.280 mi. 18-ft. gravel, Route 36, John L. Simmons, La Plata; .354 mi. gravel shoulders, Route 63, Harry Tidd, Brookfield, Mo.; Clay County—7.44 mi. 18-ft. concrete, Route 69, E. D. Tyner Construction Co., 14th and Paseo St., Kansas City.

Mo., Joplin—City, Maud E. Fons, Clk., let contract to Granite Bituminous Paving Co., 601 McKinley St., at \$1.63 per sq. yd. to pave Bird Ave., Fifteenth to Seventeenth St. 11-3

Oklahoma State Highway Comm., Oklahoma City, let contracts for 9 roads and bridge: Kay County—9 mi. grading and bridges in 2 sections, E. G. Fluke & Co., 114½ E. Second St., Tulsa, \$44,588; bridges to Pioneer Construction Co., \$38,649; Comanche County—5 mi. grading and drainage, Interstate Construction Co., \$22,421; bridge at \$22,569; Sequoyah County—grading and drainage, James & Hopper, \$19,203; two bridges, at \$17,035; Beckham County—75 mi. grading and drainage, Maney & Alley, Empire Bldg., Oklahoma City; Canadian County—1.28 mi. concrete, S. C. Maxey, 9 North Boston St., Tulsa, \$29,785; Pittsburgh County—9 mi. grading and drainage in two sections, Hamilton Construction Co., Bartlesville, \$54,026; 3 mi. rock asphalt paving, Ward-Beekman-Brooks Co., Box 1511, Oklahoma City, \$84,576; Marshall County—trestle, Whitson & Kirby, Ardmore, \$13,583; Washita County—7.3 mi. grading and drainage, Dan Sweeney, 614 W. 11th St., Oklahoma City, \$30,523; Alfalfa County—12 mi. grading and drainage, 2 sections, T. C. Ottinger, Clinton, \$40,749; bridges, H. B. Garrett, 1728 W. Main St., Oklahoma City, \$35,014; Carter County—grading and drainage, D. T. Allen, Box 6, Wetunka, \$49,116; Carik R. Mandigo, State Engr. 11-3

Tenn., Clarksville—McQuarry Bros., has contract to grade 1.02 mi. road, between Cumberland River and bridge and Searcy's Ferry, Montgomery County. Address County Commrs.

Tenn., Johnson City—City, W. O. Dyer, Commr. of Streets and City Engr., let contract to South Eastern Paving and Construction Co., Johnson City, for grading and paving streets in Improvement Dists. No. 197 and 198. 10-20

Tex., Amarillo—City let contract to Willmerring & Mullen, 96 Polk St., to pave crossing over railroads at Taylor St.; to Carl Pleasants, both Amarillo, to pave Sixteenth and One Half St.

Tex., Cuero—G. E. Brown, Luling, has contract for grading and small drainage structures on State Highway No. 81; Walsh, Burney & Moore, Frost Bldg., San Antonio, has contract for large structures, Dewitt County.

Tex., Dallas—City Comm., Arthur Reinhart, Street Commr., let contract to Fuller Construction Co., 409 Southwestern Life Bldg., at \$39,243 to pave Greenville Ave., from Prospect to Monticello St.; Uvalde Paving Co., Santa Fe Bldg., to pave 6 streets, including Hope, Beeman, Hampton.

Tex., Fort Worth—City, O. E. Carr, Mgr., let contract at about \$150,000 to pave 11 streets, including White, Cantey, Berry, with asphaltic concrete, rock asphalt coarse aggregate; Colglazier, Hoff & Everett, 922 Austin St., San Antonio; General Construction Co., 403 Cotton Exchange Bldg.; West Texas Con-

struction Co., 504 Cotton Exchange Bldg., both Fort Worth; Standard Paving Co., Majestic Bldg. 10-20

Tex., Houston—City, George Woods, Mgr., let contract to Gulf Bitulithic Co., 2820 Polk St., for 8-in. concrete, 3-in. brick top on Navigation Blvd., from Sixty-ninth Street Bridge to city.

Tex., Houston—F. H. Berry has contract to pave North Side Driveway to Turning Basin; 90 ft. wide, two roadways, 30 ft. wide, and 30-ft. esplanade.

Tex., Palestine—City, W. E. Risser, Mayor, let contract to Foly & Gaylord at \$2.45 per sq. yd. to pave N. Perry St. and around Courthouse Square. 10-27

Tex., Ralls—City, M. E. Ware, Sec., let contract to Panhandle Construction Co., Lubbock, for 2½-in. brick pavement on 5-in. concrete base on 12 blocks of streets. 11-3

Tex., Ranger—City let contract to W. E. Burke, Sweetwater, at \$149,095, for brick on 8-in. crushed stone base, on 50 blocks of residence streets. 10-27

Tex., San Antonio—City Comm., Paul E. Steffler, Commr. of Streets, let contract to Southwest Bitulithic Co., 302 Castro St., at \$6882, to pave and curb Rivas St., North Laredo to San Marcos St. 11-10

Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

Ark., DeWitt—Lund Engineering Co., Home Insurance Bldg., Little Rock, appointed engineers for sewer work; plans under way, probably be 60 or 90 days before bids are received; cost \$50,000. 11-10

Ga., Atlanta—Fulton County Commrs., reported, instructed Nym Hurt, County Highway Engr., to operate with W. A. Hansell, City Ch. of Construction, in making survey and cost estimate for erection of central sewage disposal plant on Chattahoochee River.

Ky., Louisville—Board of Public Works, reported, let the following contracts: Henry Bickel Co., 443 Garden St., for 5 contracts; Cannell-Conrad Construction Co., Todd Bldg., for 6; John F. Lynch, for 1; K. A. Barker, Floyd and Lee Sts., for 3.

La., Winnfield—City, P. J. Bumgardner, Mayor, reported, install sewerage system and water works extension.

Md., Baltimore—City, Board of Awards, receives bids Nov. 23 for sewers. See Want Section—Bids Asked.

Md., Baltimore—Natale Mortell, 4400 Vesta Ave., has contract at \$55,151 for sanitary sewers and storm drains. 10-27

Miss., Brookhaven—See Roads, Streets, Paving.

Miss., Eupora—See Water Works.

Mo., Bowling Green—City, reported, install sewer system. Address The Mayor.

Mo., Clarence—See Water Works.

Mo., De Soto—City, reported, install sanitary sewers; cost \$130,000; Chas. A. Haskins, Conslt. Engr., 822 Finance Bldg., Kansas City.

Mo., Ironton—Board of Local Improvements, reported, let contract to Fred M. Luth, 4135 Flora Blvd., for sanitary sewer and water works; cost \$90,000.

Mo., Joplin—V. E. Koch, 702 N. Pearl St., reported, has contract for sewer in Eastmoreland district, Branch A, and Charles DuBois for sewer, Eastmoreland District No. 2.

Mo., Kansas City—Director of Public Works, Matthew S. Murray, Director, reported, rejected bids on 2 sewer projects.

Mo., Ozark—See Water Works.

Mo., Springfield—Will F. Plummer, Union Natl. Bank Bldg., reported, has contract for sewer in district between National Ave., Bennett St. and Dollison Ave.; Sam R. Fisher, City Engr.

Mo., St. Joseph—Oscar H. Schmidt, Bartlett Trust Bldg., reported, low bidder for Twenty-fourth and Felix Sts. main sewer at \$27,946.

Mo., St. Louis—City, reported, plans \$50,000 bond election for sewer extension. Address Board of Public Service.

N. C., Franklin—Town, reported, will vote on sewer bonds. See Financial News—Bond Issues Proposed.

Okla., Enid—Asplund Construction Co., reported, has contract for sanitary sewer in district No. 134.

Okla., Mangum—City, reported, voted \$47,000 sewer bonds. Address The Mayor.

Okla., Oklahoma—H. B. Derr, 408 E. 12th St., reported, has contract for sewers in Edgemere Park Addition; H. M. House & Co., 1206 W. Main St., for sewer extensions in Shaws Heights. 10-20

Okla., Tulsa—E. G. Fike & Co., 114½ E. Second St., reported, has contract for sanitary sewers in Fair Acres, Plano, Foresman and Miles Additions; Foster & March, for sewers through Braden Heights.

S. C., Camden—See Roads, Streets, Paving.
Tenn., Knoxville—See Roads, Streets, Paving.

Tex., Amarillo—Tom Green, 125 S. Clegain St., Oklahoma City, Okla., has contract for 27 miles sanitary sewer for West Amarillo, and Dodson & Humphreys, Omaha, Neb., for 4 miles extension of sanitary outfall sewer.

Tex., Corpus Christi—See Water Works.

Tex., Houston—City will let contract to Dellone Construction Co., 404 Magnolia Bldg., Dallas, for storm sewers, cost \$285,000, in South Houston; 5000 ft. of 15-in. to 24-in. precast pipe, 5600 ft. of 36-in. to 78-in. monolithic round sewers, 4000 ft. of 7x11 ft. box sewers of reinforced monolithic concrete; sheet piling, inlets, trenches; Browning-Ferris Machinery Co., 205 Exposition Ave., Dallas, Michy.; J. C. McVea, City Engr. 11-3

Tex., Lampasas—See Water Works.

Tex., Laredo—City, Frank C. Heins, City Engr., reported, call for bids in Dec. for sewer system extension.

Tex., Pampa — Jordan Construction Co., Plainview, has contract at \$110,000 for sewer lines and disposal plant; A. H. Doucette, Engr.

Tex., San Antonio—City, reported, construct storm sewer on S. Pine St., from Highland Blvd. south to city limits; cost \$75,000; I. Ewig, City Engr.

Va., Hopewell—City voted \$25,000 sewer bonds. See Financial News—Bond Issues Proposed.

W. Va., Charleston—Kanawha County Commrs. receive bids Dec. 5 for sewers. See Want Section—Bids Asked.

W. Va., Huntington — City Comsn., reported, has plans for storm relief sewer for Charleston Ave. district.

W. Va., Huntington—Amos Trainor & Son, reported, has contract for sewer in Westmoreland.

W. Va., Huntington—S. R. Bishop & Co., reported, has contract for South Side storm relief sewer; cost \$36,645.

W. Va., Parkersburg—City, reported, construct sanitary sewer in Charles St. Address The Mayor.

Street Railways

D. C., Washington—Public Utilities Commission of Dist. of Columbia, reported, has under consideration plan for merging the Capital Traction Co., the Washington Railway and Electric Co. and subsidiaries and the Washington Rapid Transit Co.; plan devised by Harley P. Wilson, Director of North American Co. 11-10

Telephone Systems

Ark., Fort Smith—Southwestern Bell Telephone Co., St. Louis, Mo., reported, expend about \$49,000 on improvements, replace copper circuits between Little Rock and Fort Smith.

Mo., Kansas City—Southwestern Bell Telephone Co., 1010 Pine St., St. Louis, let contract to Lonsdale Brothers, Bryant Bldg., for addition to rear of Jackson exchange building; 46x40 ft., 1 and 2 story, with basement; brick and reinforced concrete, fireproof, reinforced concrete floors and roof; install telephone equipment; Hoffman controlled heating system installed by United States Engineering Corp., 914 Campbell St.; Hodge Electric Co., 724 Delaware Ave., lighting; McKinley Plumbing & Heating Co., 1012 Troost Ave., plumbing. 11-10

N. C., Durham—American Telephone and Telegraph Co., L. J. Harter, Div. Plant Supt., 952 Hurt Bldg., Atlanta, Ga., reported, let contract to Morris-McKoy Building Co., Finlay Bldg., Greenville, S. C., for erection repeater station, 1-story and basement, 66x50-ft., fireproof, reinforced concrete frame, brick exterior, terra cotta back-up walls; cost about \$40,000.

N. C., Norlina—American Telephone and Telegraph Co., L. J. Harter, Div. Plant Supt., 952 Hurt Bldg., Atlanta, Ga., re-

ported, let contract to Morris-McKoy Building Co., Finlay Bldg., Greenville, S. C., for erection repeater building, 1-story and basement, 66x50-ft., fireproof, reinforced concrete frame, brick exterior, terra cotta back-up walls; cost about \$40,000.

Texas—Southwestern Bell Telephone Co., Percy Redmond, Gen. Mgr., St. Louis, Mo., reported, gross expenditures amounting to nearly \$8,000,000 to be spent in Arkansas, Kansas, Oklahoma and Texas were approved during third quarter of 1927; almost entire amount will be spent on new equipment.

Tex., Brackettville—Del Rio and Western Telephone Co., reported, plans improvement to system.

Tex., Houston—W. E. Humphreysville Co., Second Natl. Bank Bldg., reported, has contract for plastering on Hadley exchange building of the Southwestern Bell Telephone Co.; P. O. B. Montgomery, Contr., Const. Indus. Bldg., Dallas. 7-7

Tex., League City—Texas Associated Telephone Co., reported, acquired equipment of League City Telephone Co.

Tex., Pasadena—Southwestern Bell Telephone Co., St. Louis, Mo., reported, contemplates building new telephone exchange; survey being made.

Tex., San Marcos—San Marcos Telephone Co., Merton Swift, Mgr., received low bid from G. L. Kennedy, at \$13,350, for telephone building; 2-story, 29x40 ft., monolithic type, stucco, concrete floor slabs, plumbing and electric wiring; David C. Donaldson, Architect. 9-29

Va., Norfolk — Chesapeake and Potomac Telephone Co., Edwin F. Hill, Information Mgr., 725 Thirteenth St. N. W., Washington, D. C., advises Western Electric Co. (suppliers of Bell System), will supply all materials used for installation of long distance circuits from Norfolk to Greenville and New Bern, N. C.; labor by Company's forces. 11-3

Textile Mills

Ala., Florence—Ashcraft Cotton Mills, reported, change name to Florence Cotton Mills; M. R. Dickson, Pres., 65 Leonard St., New York; Frederick Moore, Sec.; plans enlarging plant.

Ark., Magnolia—J. E. Sirrine & Co., Engrs., Greenville, announces that contract for electrical installation, power and lighting at Magnolia Cotton Mill, has been let to Floyd Electrical Co., Martin Bldg., Birmingham; electrical equipment, including individual spinning and loom motors and small group motors for card room, lighting regulator, transformers and switchboard was recently purchased from Allis Chalmers Mfg. Co., Milwaukee, Wis. 8-25

Ga., Cedartown—Charles Adamson, Pres., Cedartown Cotton and Export Co., announces securing of knitting mill for city; will take over property formerly occupied by Barnes Knitting Co., remove old knitting machines, install new machines to double or treble capacity of mill for present and later build mill.

Ga., Lafayette—Lafayette Cotton Mills, reported, let contract to West Point Iron Works, West Point, for additions to plant; cost \$100,000; 2 stories, 50x132 ft., and 1 story, 159x132 ft.; brick walls; Barrett roof; wood floors; Robert & Co., Inc., Archts., Bona Allen Bldg., Atlanta.

Ga., Summerville—Sidney M. Edelstein & Co., Industrial Engrs., Union, S. C., wires: "We were consulted today regarding a new hosiery plant to be located in Summerville, to be known as Montgomery Knitting Mill; charter will be applied for next week; authorized capital \$100,000; will be headed by E. Montgomery and Wesley Schropshire; will occupy building now empty; will manufacture children's rayon and cotton hosiery; all local capital; will buy all new equipment and are seeking selling connection."

N. C., Greensboro — Proximity Mfg. Co., Bernard M. Cone, Pres., will construct \$250,000 weaving plant of ultimately 1000 and immediate 500 looms capacity and 100 cottages for employees; 2 story, fireproof, 144x260 ft.; cost of entire project \$400,000; J. E. Sirrine & Co., Engrs., Greenville; Draper Corp., Hopedale, Mass., machinery contrs.

N. C., Lexington—Lexington Silk Mill, Inc., capital \$200,000, incorporated; J. T. Hedrick, J. V. Moffitt, J. C. Grimes; will erect building 64x298 ft.; purchased entire plant of Wechsler Barber Silk Co., Paterson, N. J., and mill move 140 looms and other machinery here by Feb. 1.

N. C., Liberty—Dependable Hosiery Mills, Inc., capital \$125,000, incorporated; E. W. Fuller, Raeford; Thos. A. Johnson and C. P. Smit, Jr.

N. C., Mount Holly—Carolina Dyeing and

Winding Co., Inc., will occupy building under construction by C. E. Hutchinson of American Yarn and Processing Co.; R. C. Biberstein, 1614 Elizabeth Ave., Charlotte, Engr. and Archt.

N. C., Spindale—J. F. McAllister Co., Alester G. Furman Co., V. M. Manning and H. T. Mills, are offering \$175,000 6% Serial Gold Bonds of The Elmore Co.; company manufactures sewing thread and has complete equipment for mercerizing, bleaching and dyeing; proceeds to be used for paying off bank loans and to provide for working capital.

N. C., Stanley—R. F. Craig, Stanley; J. A. Gardner, 211½ N. Tryon St., Charlotte, reported, acquired buildings and other property of Lola Gingham Mills; will re-equip and operate.

N. C., Statesville — Grier-Lowrance Co., Statesville, reported, has contract for silk tapestry mill for Gagner Mfg. Co., Adams, Mass.; 1 story, 216x92 ft.; daylight construction; brick walls; built-up roof; wood floors; work to begin at once; contract includes heating, plumbing and wiring.

S. C., Greenville — Re-organization, reported, of Art Cloth Mills, formerly Judson Mill No. 3 and change of name to National Weaving Co.; issue \$300,000 preferred stock; R. L. Stowe, Pres.; A. C. Lineberger, Jr., Sec.-Treas.

S. C., Laurens—Pioneer Braid Co., capital \$250,000, incorporated; Joseph M. Adiman, J. W. Todd; establish braid mill. 10-6

S. C., Newberry — Oakland Cotton Mill (subsidiary of Kendall Mills, Inc.), J. N. McCaughrin, Pres., let contract to W. A. Briggs, Capers Bldg., Greenville, for curb, gutters and storm drainage in new portion of village; contract price \$11,000; plans and supervision of village improvements by E. S. Draper, Landscape Archt. and Engr., Charlotte, N. C., and Atlanta, Ga.

S. C., Spartanburg—Stockholders of Enoree Mills voted to change name to Riverdale Mills; no improvements or construction contemplated.

Tennessee—Adrian Knitting Products Co., Adrian, Michigan and Sauquoit, New York, reported, considering establishment of branch plant.

Tenn., Athens—G. F. Lockmiller, Pres., Citizens National Bank; Tom Sherman and W. T. Roberts, reported, interested in establishment of knitting mill by New England capitalists.

Tenn., Elizabethton—Loftis Plumbing and Heating Co., Atlanta, Ga., reported, has contract for plumbing and sewerage for American Bemberg Corp.'s plant in Happy Valley. 10-27

Tenn., Kingsport—Kingsport Hosiery Mill is installing seamless knitting machinery.

Tenn., Knoxville—Holston Knitting Mills, Ninth and Mitchell Sts., reported, let contract to J. M. Dunn & Son, 245 Broad St., for concrete and steel building, 1 story, 50x130 ft.; roof truss will be single span; cement floors; steel window sash; cost \$15,000.

Tenn., Shelbyville—Bryant Woodsley and associates, reported, incorporate American Hosiery Mills, capital \$50,000; operate full fashioned hosiery mill; equip with Karl Lieberknecht 42-gauge, 24-section machine.

W. Va., Parkersburg—John P. Pettyjohn Co., 712 Eighth St., Lynchburg, Va., reported, has contract to erect buildings for Viscose Co., in South Parkersburg; one building for employees the other for storage warehouse; brick, concrete and steel, 1 story; cost \$60,000.

Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that classification.

Ala., Birmingham—Alabama Public Service Comm., Montgomery, reported, granted permission to Birmingham Water Co. to construct and operate water works system in Homewood.

Alabama—Alabama Public Service Comm., Montgomery, reported, approved petition of Alabama Water Service Co., Birmingham, to acquire Alabama Water Co. and Fort Payne Water Co., Fort Payne.

Ark., DeWitt—City, W. H. Davis, Commr., having plans and specifications prepared by Lund Engineering Co., Home Insurance Bldg., Little Rock, for \$70,000 water works; date of opening bids not set.

Ark., Fort Smith—City, J. H. Parker, Mayor, will have public hearing in about 30 days on construction of proposed dam across Poteau River. 11-10

Ga., Oehlocknee—Town let contract to W. R. McGrew & Co., Thomasville, for \$10,000 water works improvements; install galvanized pipe and elevated tank. 11-10

Ky., Carlisle—City voted \$25,000 bonds for filtering plant and other improvements. Address The Mayor.

La., Winnfield—See Sewer Construction.

Md., Hagerstown—City receives bids Nov. 22 for pipe line. See Want Section—Bids Asked.

Miss., Brookhaven—See Roads, Streets, Paving.

Miss., DeKalb—Chamber of Commerce, reported, interested in installation of water works system.

Miss., DeKalb—City, reported, selected Henry A. Ments, Hammond, La., as consulting engineer for water works; will soon vote on bonds.

Miss., Eupora—McEachin & McEachin, Home Insurance Bldg., Little Rock, Ark., reported, have contract for installing water works and sewerage. 9-29

Miss., Jackson—City, W. A. Scott, Mayor, reported, let contract to Faulkner Concrete Pipe Co., Carter Bldg., Hattiesburg, for pipe.

Mo., Clarence—City, reported, defeated \$130,000 bonds for water works and sewerage; J. C. Maupin, Mayor. 10-27

Mo., Ironton—See Water Works.

Mo., Kansas City—City plans voting on \$4,000,000 bonds for water works. See Financial News—Bond Issues Proposed.

Mo., Ozark—City, J. C. Rogers, Mayor, contemplates expenditure of \$15,000 for extension of water and sewer system; date of opening bids not determined. 10-27

Mo., St. Louis—Board of Public Service, reported, received low bid from Michigan Valve and Foundry Co., 3631 Parkinson St., Detroit, Mich., for gate valves at Missouri River Pumping Station, at Howard Bend; Builders Iron & Foundry Co., Providence, R. I., for water meters and venturi tubes. 11-3

N. C., Asheville—Howerton Engineering Co., Const. and Constr. Engr., 410 New Medical Bldg., are engineers for Swannanoa Water and Sewer District; contract for 10,000 ft. of 6 and 8 in. pipe line let to Kelly-Wilson Co., Asheville; cost \$15,000; construction to begin Dec. 1; this work is portion of \$2,000,000 Swannanoa Water and Sewer District; balance of water line, amounting to \$300,000, will probably be constructed about the first of the year. 11-3

N. C., Charlotte—City Commrs., reported, authorized W. E. Vest, Supt. Water Works, to lay 8-in. water main on Park Rd.

N. C., Dunn—Town, George L. Canady, Mayor, receives bids Nov. 21 for water works improvement. See Want Section—Bids Asked.

Okla., Alva—City, T. Ketch, City Clk., reported, let contract to G. M. Roebuck, Omaha, Neb., for flow line.

Okla., Bristow—City, reported, votes Nov. 15 on \$44,000 water works improvement bonds; C. L. Wilson, Engr., Weatherford.

Okla., Cheyenne—City, reported, plans water works; C. A. Wood, Engr., Stillwater.

Okla., Mangum—City voted \$75,000 water extension bonds. Address The Mayor.

Okla., Marshall—City, reported, let contract to Sherman Iron Works, 18 E. Main St., Oklahoma City, for extending water works.

Okla., Purcell—City, reported, having preliminary plans prepared for water works improvements; Horner & Wyatt, Engrs., 408 Board of Trade Bldg., Kansas City, Mo.

Okla., Rocky—City, reported, let contract to E. W. Baker & Co., Perrine Bldg., Oklahoma City, for water works. 9-1

S. C., Saluda—Harwood Beebe & Co., Montgomery Bldg., Spartanburg, reported, have contract to supervise installation of water works and sewerage system; E. R. Justice, making preliminary survey. 9-29

Tenn., Harriman—Tennessee Electric Power Co., Chattanooga, reported, authorized expenditure of \$10,000 for improvements to water works.

Tenn., Knoxville—See Roads, Streets, Paving.

Tenn., Petersburg—City, G. T. Stephenson, Mayor, let contract to McCalla and Switzer, Knoxville and Fayetteville, for concrete reservoir and pumping system; cost \$25,000. 11-10

Tex., Bellville—City voted \$55,000 water works bonds. Address The Mayor.

Tex., Brownsville—City, F. H. Williams, Supt. Public Works, reported, has tentative

plans for enlarging filtration plant; expend \$25,000.

Tex., Corpus Christi—City, P. G. Loven-skiold, Mayor, reported, plans extending water and sewer system and gas mains.

Tex., Dickinson—Dickinson Ice and Fuel Co., reported, install \$10,000 water works system, erect 50,000 gal. tank on tower 100 ft. high, 6-in. water mains.

Tex., Lampasas—City votes Dec. 6 for water and sewer bonds. See Financial News—Bond Issues Proposed.

Tex., Marathon—J. Allison, reported, plans 13 mile water mains on 45,000 acre ranch.

Tex., San Benito—Central Power and Light Co., San Antonio, Texas, erecting filtration pumping plant with capacity 1,000,000 gal. daily with additional 500,000 gal. filter which can be used when necessary; equipment for filters, piping, controls cabinets, dry feed chemical mixers and including laboratory, being furnished and erected complete for operation by International Filter Co., 333 W. 25th Place, Chicago, Ill.; pumps, low head and high lift, Fairbanks-Morse & Co., 1713 N. Market St., Dallas; cast iron pipe for suction line, service line and clean-out line, U. S. Cast Iron Pipe and Foundry Co., American Trust Bldg., Birmingham, Ala.; valves, Darling Valve and Manufacturing Co., West Bldg., Houston; power wiring including switchboard for 2300 volt and lighting system, Mercedes Electric Co., Mercedes; plumbing and fixtures, F. L. Gay Plumbing Co., San Benito; cast stone coping, W. T. Liston & Son, Harlingen; all building material such as sand, gravel, cement and lumber are being purchased locally; structural and reinforcing steel, Orange Car and Steel Co., Orange; erection of building proper and installation of equipment being supervised by J. W. Wolter.

Tex., Taylor—City Comm., reported, let contract to L. L. Stephenson, San Antonio, for water works system.

Tex., Teague—Fred Fielding, Mexia, reported, has contract for water well; construct underground concrete storage reservoir of 125,000 gal. capacity, fireproof pump-house.

Tex., Wichita Falls—City, reported, votes Dec. 10 on \$1,800,000 bonds for mortgaging entire water works system to Eldredge & Co., 14 Wall St., N. Y., in order to provide for necessary improvements and take up \$660,000 outstanding bonds.

Va., Norton—North American Water Works Co., 11 Broadway, New York, reported negotiating for municipal water system.

W. Va., Grafton—City, reported, plans additional reservoir; John M. Rice, Const. Engr., Pittsburgh, Pa.

W. Va., Huntington—City, receives bids Nov. 28 for lateral sewers. See Want Section—Bids Asked.

Woodworking Plants

Fla., Sanford—Sanford Sash and Door Co., Inc., capital \$25,000, chartered; Geo. Smith, Jr., W. N. Lane.

Fla., Tampa—Florida Orangewood Products, Inc., N. Fremont and Pine St., F. D. Carten, Sec., 605 Grand Central Ave., will install cut-off saw, rip saw with carriage, etc.; manufacture orange novelties, specializing in manœuvre sticks. See Want Section—Machinery and Supplies. 11-10

Md., Baltimore—Heywood-Wakefield Co., Frank Ware, Mgr., 113 W. Conway Street, has taken over 50,000 additional floor space in adjacent building; manufacture of chairs, furniture, etc.

Md., Baltimore—Upholstered Furniture—Union Brothers, Philip and Reuben Union, partners, 37 W. Cross St., reported, erect 3-story plant addition, contain about 32,000 sq. ft. floor space; also contemplates erection branch plant for making different line furniture; Benj. Franks, Archt.; have most of machinery necessary.

Md., Baltimore—Furniture—Levenson & Zenitz, Howard and Ostend St., plans erecting plant addition.

Mo., St. Louis—Central Furniture Co., Emil Ritter, Pres., 3223 Bailey St., reported, rebuild factory, recently damaged.

N. C., Wilmington—Corbett Package Co., W. A. Corbett, Owner, let contract for plant addition, cost \$20,000; install \$10,000 equipment; manufacture hampers, barrels, berry crates, etc., daily output 3 cars. 11-10

Tenn., Memphis—Chas. Wunderlich Cooperage Co., 821 Clinton St., St. Louis, Mo., installing Universal vacuum dry kiln equipment in stove plant, furnished by Universal Vacuum Dryer Co., Kansas City, Mo.

Tex., Marshall—The Marshall Wood Prod-

ucts Co., Wm. Gaylord, Gen. Mgr., advises: Recent increase of capital was used for erection of one additional warehouse building, 48x56 ft.; contract let to Turney Building Co., Marshall. 11-3

FIRE DAMAGE

Ala., Frithurst—School building. Address Mr. Vickers, Supt. of Schools.

Ark., Blytheville—Residence of T. J. and Howard Proctor, N. Railroad St.

Ark., El Dorado—Root Oil Refinery Co.'s plant; loss \$50,000.

Ark., Little Rock—Warehouse of the Arkansas Broom Works, 2124 E. Sixth St.; loss \$20,000; C. V. Hoke, Mgr., 4200 Fairview Rd.

Fla., Miami Beach—C. E. Brogden's residence, Sheridan Ave. and 35th St.; loss \$10,000.

Ga., Augusta—Satcher Grocery Co.'s warehouse; loss \$10,000.

Ky., Murray—Johnson & Hood Furniture Store, W. W. McElrath grocery, N. F. Lassiter's notion store; loss \$25,000.

Ky., Richmond—Armory of 117th and 118th Field Hospital Corps, Kentucky National Guard, owned by Mrs. R. J. McKee; also cream receiving station; loss \$50,000 to \$75,000.

La., Alexandria—Hunter-Rockwell Lumber Co.'s planing mill, loss \$25,000.

La., Bordelonville—Roman Catholic Church; Rev. Peter Besselaar, Pastor.

La., Ferriday—City Restaurant on Main St. Address Propr.

Miss., Jackson—Ricks Storage Warehouse, J. P. Ricks, 848 North St., owner; loss \$200,000.

Miss., Lyman—Lyman Hotel owned by Batson-Hatten Lumber Co.

Miss., Quitman—First Baptist Church; loss \$15,000.

Mo., Cape Girardeau—Apartment house at 125 S. Morimer St., owned by Russell R. Deal; loss \$10,000.

Mo., Holden—High school building; loss \$30,000. Address Board of Education.

Mo., Kansas City—Cut Rate Tire Corp.'s building, 1524 Grand Ave.; loss \$10,000.

Mo., St. Louis—Wightman Bros.' boat yard at foot East Grand Ave., loss \$60,000.

Mo., Wellston—Portion of American Press Brick Co., 6500 Easton Ave.; loss \$20,000.

N. C., Burgaw—Graysburg Manufacturing Co.'s planing mill.

N. C., Salisbury—Southern Public Utilities Co.'s car barns.

N. C., Waco—Mrs. W. L. Dameron's residence, No. 6 Township near Waco.

Okla., Fort Sill, Lawton—Quartermaster warehouse, Fort Sill. Address Constructing Quartermaster.

Okla., Madill—C. L. Turley Clothing Co., Imperial Barber Shop and Palace Cafe; loss \$50,000.

Okla., Wilburton—Ike Baer Dry Goods Co., Yourman Co., First State Bank, Hughes Hardware Co. and W. W. Knight real estate office; loss \$80,000.

S. C., Greenwood—W. R. Gatlin's store.

S. C., Orangeburg—Velvo Products Co.'s warehouse; loss \$10,000.

Tenn., Bradford—Hotel building owned by Hess McKenzie.

Tenn., Clarksville—S. H. Kress Co.'s store at Franklin and Second Sts.; loss \$100,000.

Tenn., Elizabethton—Smoke Shop on Elk Ave.; loss \$10,000.

Tenn., Huntingdon—Residence of Chas. Caraway, Republican Grove community.

Tenn., Jackson—Elks' Bldg.; loss \$10,000.

Tenn., LaFollette—Dr. H. L. Winkler's residence.

Tenn., Lavinia—Methodist Episcopal Church, South; 2 schools.

Tenn., Nashville—Dwelling, Dickerson Pike, owned by J. R. Vaughan, Ind. Life Bldg.; loss \$13,000.

Tenn., Obion—Old Wison Hotel; loss \$10,000. Address The Propr.

Tex., Amarillo—Warehouse of M. & L. Transfer Co.; loss \$125,000.

Tex., Coleman—H. O. Wooten Wholesale Grocery Co. building; loss \$45,000.

Tex., Holland—First State Bank building; loss \$10,000.

Tex., Houston—Eleven dwellings, Fourth Ward, including store and dwelling, 1402 W. Dallas St., owned by estate of Tony Cuilla, occupied by Jacob Epstein and Kate Banks; total loss \$30,000.

Tex., Orange Grove—R. Rubin Drygoods Co.'s building; Hugo Mueller's Owl Drugstore; Fred Hillmer's Enterprise Meat Market; Adolph Wendt's store; loss \$40,000.

Tex., Port Arthur—Southern Seafood Co., Gibson Fish Co., Jackson Seafood Co., B. J. Loomis' store, Halton's curio store, W. H. Bryan's grocery, Tom Matthews' restaurant

Tex., Rusk—Singletary Cafe and Baker; Wallace Variety Store; loss \$25,000.

Tex., San Marcos—Mutual Mercantile Co. building on Northwest cor. of Square; C. T. Bass & Son, owners; loss \$70,000.

Tex., Seymour—A. E. Richmond's residence; loss \$10,000.

Tex., Tioga—First Christian Church; loss \$12,500; Rev. Eddie R. McWilliams, Pastor, Van Alstyne.

Tex., Water Valley—Hall Bros.' cotton gin at Gardens Valley; loss \$10,000.

Va., Norfolk—Combination boiler and dynamo room at Swift & Co.'s plant, Water and Jackson St.

Va., Purcellville—W. L. Thompson's barn; loss \$10,000.

W. Va., Charles Town—Virginia Barrel Co.'s plant, Whitmore Lumber Co.'s warehouse, dwelling of E. B. Reed and building owned by Mrs. O. M. Phillips; loss \$50,000.

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

Fla., Coral Gables, Miami—Mahi Temple, A. A. O. N. M. S., accepted offer of 53-acre tract from Geo. E. Merrick; erect clubhouse and complete 9-hole golf course. 8-18

Miss., Piquette—Young Men's Christian Assn. erect \$40,000 brick building; 2 stories, 90x160 ft., pine floors, concrete foundation, asbestos built-up roof; furnishings, equipment, etc., \$7500; Rathbone DeBuys, Archt., Hibernia Bank Bldg., New Orleans, La. See Want Section—Building Material and Equipment. 11-10

Tex., San Antonio—Salvation Army, Avenue E and Fourth St., will receive bids for \$200,000 building through Atlee B. and Robt. M. Ayres, Archts., Bedell Bldg., upon return of plans from Atlanta, Ga.; Spanish type, rein. concrete frame, face brick, tile corridors, gravel roof. 7-14

Bank and Office

Mo., Kansas City—Southwestern Bell Telephone Co., E. D. Nims, Pres., St. Louis, let contract to American Bridge Co., 71 Broadway, New York, for furnishing steel for 13 additional stories to 14-story administration and equipment building, and contract for steel erection to St. Louis Steel Erection Co., Syndicate Trust Bldg., St. Louis; will receive bids on general contract Nov. 21; terra cotta exterior, concrete floors, 125x96 ft., new heating system, new elevators, plumbing and electric wiring, metal windows throughout addition; Holt, Price & Barnes, Archts., Davidson Bldg., Kansas City; I. R. Timlin, Asso. Archt., Telephone Bldg., St. Louis. 11-10

Okla., Oklahoma City—Drs. E. P. Allen, L. J. Moorman and Horace Reed, all Medical Arts Bldg., erect office and clinic building, Classen Blvd. near Tenth St.

Okla., Tulsa—Oklahoma Natural Gas Co., 17 W. Fourth St., receives bids Nov. 15 for 10-story office building; cost \$350,000; brick, stone and terra cotta, concrete foundation, cement, tile and marble floors, composition roof, hollow and drain tile, metal lath; Arthur M. Robinson, Archt., Mid-Continent Bldg. 11-3

Tex., Quanah—West Texas Utilities Co., Abilene, erect \$25,000 office building; brick, hollow tile, stucco and concrete, 1 story; Adams & Adams, Archts., Builders Exchange, San Antonio.

Tex., San Antonio—Federal Reserve Bank will take bids through Atlee B. and Robt. M. Ayres, Archts., Bedell Bldg., upon return of plans from Washington; cost \$250,000, rein. concrete, 2 stories and basement, 60x80 ft., tar and gravel roof; W. E. Simpson & Co., Engrs., Natl. Bank of Commerce Bldg. 10-6

Tex., Waco—E. R. Nash, 1625 Morrow Ave., Wm. C. Abeel, 3400 Austin Ave., F. M. Compton, 1024 Austin Ave., and others, are members of committee to work out details for 12-story Medical Arts Bldg., Ninth and Austin Sts.; artesian well.

Churches

Ark., Osceola—Presbyterian Church, Rev. C. M. Boyd, Pastor, plans building.

Ark., West Fork—Presbyterian Church erect \$10,000 to \$15,000 building. Address Rev. D. T. Waynick, Siloam Springs.

Fla., Jacksonville—First Evangelical Church erect \$20,000 building, Market St. near Ninth St.; 2 stories, tile and stucco. Address The Pastor.

Ga., Mansfield—Baptist Church remodel building. Address The Pastor.

La., Ruston—First Baptist Church, T. A. Green, Chmn., Bldg. Comm., receives bids Dec. 1 for annex and alteration and repair of present building; plans and specifications from Pastor and from Ferrand & Fitch, Archts., Slaughter Bldg., Dallas, Tex. 7-21

Md., Baltimore—West Baltimore M. P. Church, Allen W. Beam, Chmn., Site Comm., Fulton and Harlem Aves., plans building, Edmondson Ave. and Charing Cross.

Md., Frederick—Calvary M. E. Church, R. Rush Lewis, member, Bldg. Comm., considers erecting \$175,000 to \$200,000 church and Sunday school facing Memorial Ground, instead of remodeling and enlarging Sunday school at cost of \$30,000, as lately reported. 10-27

Miss., Brooksville—Bethesda Baptist Church near Brooksville remodel church and erect Sunday school rooms. Address The Pastor.

Miss., Columbia—First Presbyterian Church considers erecting addition or remodeling church. Address The Pastor.

Miss., Hickory Flat—Baptist Church, Rev. Hubert Collins, Pastor, erect \$10,000 building.

Miss., Laurel—Immaculate Conception Church, Rev. Tom Haynes, Pastor, plans \$15,000 building.

Miss., Mississippi City—Holiness Church, care W. J. Hosch, Courthouse St. and R. R., erect building; bids in.

Miss., Quitman—First Baptist Church, Rev. J. W. Faulkner, Pastor, rebuild structure noted burned at \$15,000 loss.

Mo., St. Louis—Holy Trinity R. C. Church, 14th and Mallinckrodt Sts., A. B. Russmann, care Bussmann Manufacturing Co., 3819 N. 23rd St., Chmn., Restoration Comm., restore church damaged by tornado; cost \$150,000; raising funds.

N. C., Salisbury—Hobart Upjohn, Archt., Grand Central Terminal, New York, reported, drawing plans for \$600,000 church and Sunday school; 1 and 3 stories, stone and brick, steel frame.

N. C., Spencer—Methodist Protestant Church, Rev. T. Glenn Madison, Pastor, plans \$12,000 to \$15,000 building.

N. C., Winston-Salem—St. Paul's P. E. Church, Rev. R. E. Gribbin, Rector, having plans drawn by Cram & Ferguson, Archts., 248 Boyston St., Boston, Mass., for building, Five and One-Half and Summit Sts. 11-10

Okla., Elk City—First Baptist Church plans building. Address The Pastor.

Okla., Holdenville—Roman Catholic Church has gift from Louis Vallier of site for church.

Okla., Three Sands—Methodist Church, Rev. J. W. Kendall, Pastor, Tonkawa, plans building.

S. C., Anderson—Central Presbyterian Church erect brick veneer building; 2 stories, 49x77 ft.; Casey & Fant, Archts., bids in.

S. C., Columbia—Shandon Methodist Church, Rev. F. E. Dibble, Pastor, erect \$100,000 building, Divine St. near Holly St.

Tex., Austin—St. David's Church, Rev. L. Valentine Lee, Pastor, having plans drawn by Edwin C. Kreisler, Archt., Scarborough Bldg., for \$75,000 parish house; 2 stories, auditorium, classroom, kitchen. 11-3

Tex., Dayton—First Methodist Church erect \$30,000 building; brick and tile, 2 stories and basement; Chas. P. Jones and C. N. Nelson, Asso. Archts., Binz Bldg., Houston.

Tex., Houston—South End Christian Church erect \$250,000 main auditorium as final unit of structure; Hedrick & Gottlieb, Archts., Post-Dispatch Bldg.; inaugurate fund campaign Dec. 4; R. S. Sterling, Chmn., Bldg. Comm.

Tex., Lubbock—First Methodist Church, R. E. Murray, Chmn., Bldg. Comm., erect \$75,000 annex.

Tex., San Angelo—Emanuel Episcopal Church erect building, Harris Ave. and Randolph St.

City and County

Ala., Mobile—Mobile County Board of Revenue, Arthur D. Davis, Chmn., considers brick addition for offices, 109 St. Emanuel St.

Fla., Chipley—Washington County Commissioners receive bids Nov. 30 for courthouse; plans ready by Nov. 15; cost \$200,000, brick, stone trim, 2 stories and basement, 110x58 ft.; Frank W. Lockwood, Archt., 119 Adams St., Montgomery, Ala.

Fla., Pensacola—City, J. H. Bayliss, Mayor, votes Dec. 13 on \$50,000 library and \$25,000 stadium bonds. 11-10

Ga., Canton—Cherokee County Board of Courthouse Commrs., E. A. McCanness, Chmn., receives bids Dec. 14 for courthouse and jail; cost \$150,000, fireproof, rein. concrete frame, brick and marble walls, 2 stories and basement and 4 stories and basement, about 93x82 ft.; separate bids for (1) general contract, including mechanical work, and (2) jail work; plans and specifications from A. Ten Eyck Brown, Archt., 717-20 Forsyth Bldg., Atlanta, and on file at office of Commissioner of Roads and Revenues of Cherokee County. 11-3

Miss., Biloxi—City, J. J. Kennedy, Mayor, receives bids Nov. 21 for fire station; E. Howard Ave.; also receives bids same date for community building at play grounds; plans and specifications from The Mayor.

Miss., Grenada—City votes Dec. 3 on \$35,000 city hall bonds.

Miss., Gulfport—Harrison County Board of Supervisors receives bids Dec. 5 for additions to courthouse and repairs to jail; 2 stories, brick; cost \$50,000; Harkness & Lockyer, Archts., P. O. Box 884. 11-3

Mo., Kansas City—City, H. F. McElroy, City Mgr., may call election in Spring on \$25,000,000 bonds, including \$1,000,000 for stadium, \$4,000,000 for municipal auditorium and \$5,000,000 for city hall; Jackson County may also vote on \$11,500,000 bonds, including \$5,000,000 for courthouse.

N. C., Roxboro—Person County Board of Commrs., A. C. Gentry, Chmn., will issue \$100,000 bonds for courthouse.

Okla., Tulsa—City Commission authorized \$120,000 bond issue for 3 fire stations, Pine St. and Peoria Ave., Harvard Ave. and 15th St., and Red Fork. 7-14

W. Va., Clarksburg—City, D. H. Hamrick, Clk., received bids Nov. 15 for Central Fire Station; cost \$80,000; 2 stories and basement, 43x97 ft., tile floors, steel frame, brick, stone and block; separate bids for plumbing, heating and electrical work; Edw. J. Wood & Son, Archts., 30-32 Lowndes Bldg. 11-10

W. Va., Weston—City Council erect building, rear of city hall, to house machinery, apparatus and equipment of city.

Dwellings

D. C., Washington—John Bieher has \$18,000 permit for 2 dwellings, 4123-25 Military Rd. N. W.; 2 stories, brick and tile.

D. C., Washington—L. E. Breuninger & Sons, Colorado Bldg., have \$15,000 permit for dwelling, 1305 Hemlock St. N. W.; 2 stories, brick and stucco.

D. C., Washington—Endora B. Johnson has \$21,000 permit for 2 brick and tile dwellings and garages, 2815-17 Bellevue Terrace N. W.; 2 stories.

D. C., Washington—Allen C. Minnix, 1416 F St. N. W., has \$25,000 permit for 2-story tile residence, 4855 Linnean Ave. N. W.

Fla., DeLand—Robt. W. Smith, Kimberly, South Africa, purchased tract on St. Johns River; erect residence. Address Chamber of Commerce, DeLand.

Fla., Jacksonville—H. Dunlap Morrison, Archt., drawing plans for 2-story brick veneer residence.

Fla., Miami—Albert D. Lasker, 400 N. Michigan Ave., Chicago, Ill., reported, plans \$100,000 residence.

Fla., South Jacksonville, Jacksonville—E. L. Gunn erect Colonial residence, San Marco; 2 stories, 8 rooms.

Fla., South Jacksonville, Jacksonville—Better Homes Co. erect dwelling, San Marco.

Ga., Atlanta—D. S. McClain, 194 Peachtree Rd., erect \$60,000 residence; brick and stucco, 2 stories and basement, hardwood floors, steam heat; Pringle & Smith, Archts., Norris, Bldg., probably have plans ready by Nov. 15.

Ga., Atlanta—Arthur Vogel erect brick residence, Haynes Manor; 2 stories and basement, tile or slate roof; Claude W. Shelverton, Archt., Grand Bldg., Macon; bids in.

Ga., Augusta—J. Frank Ellis, 1221 Monte Sano Ave., erect residence, Walton Way.

Ky., Louisville—John Eisenbeis, 2501 Dundee Rd., erect \$13,000 brick residence, 1914 Trevillian Way.

La., New Orleans—Chas. Mumphy, 1213 N. Peters St., about ready for bids on brick residence, Crestmont Park, Metairie Ridge; 1-story and basement, tile roof, hot water heat, copper screens; Theo. L. Perrier, Archt., Maritime Bldg.

La., New Orleans—G. W. Charlton, 1001 Webster St., erect single residence, 3512 Uperline St.

La., New Orleans—Miss Ella Hardie receiving bids for alterations and additions to 2-story frame residence, 1582 Henry Clay Ave.; Alex W. Norman, Archt., Cotton Exchange Bldg.

Md., Baltimore—Andrew L. Blankner, Title Annex Bldg., erect 10 brick dwellings, 3200 block Ellerslie Ave.; 2 stories; total cost \$30,000.

Md., Baltimore—Walter H. Cook, Munsey Bldg., erect number dwellings, Milford on Liberty Road, near Gwynn Oak Junction.

Md., Baltimore—Harry L. Dubbelde Co., 2407 Ellamont Ave., erect 6 brick dwellings, 1 block Cedar Ave.; 2 stories; total cost \$15,000.

Md., Baltimore—Realty Sales and Development Co., Room 103, Long Bldg., 10 W. Chase St., Aug. W. Schnepfe, Pres., erect cottages, connection with 200-acre development.

Md., Baltimore—J. Irving Bealmear, Fidelity Bldg., erect 7 brick dwellings, 4400 block Clifton Ave.; 2 stories; total cost \$20,000; owner builds.

Md., Baltimore—Maryland Realty Corp., 3100 Clifftown Ave., erect 15 brick dwellings, 2900 blocks Westwood Ave. and Presbury St.; 2 stories; total cost \$45,000.

Md., Baltimore—Geo. C. Thomas, New Amsterdam Bldg., erect 6 brick dwellings, 4241-51 Wickford Rd., Roland Park; 2½ stories, 9 rooms, 2 baths; total cost \$36,000.

Md., Catonsville, Baltimore—L. M. Shipley erect Colonial residence, Summit Park.

Miss., Biloxi—Jack Kornmann erect 2 additional 5-room bungalows.

Miss., Brookhaven—First Methodist Church plans parsonage, W. Cherokee St. Address The Pastor.

Miss., Ocean Springs—J. G. Little, Mgr., Gulf Hills, receiving bids on hollow tile work, roofing tile and carpentry for 8 California type bungalows; cost \$70,000.

Mo., St. Louis—H. Boharian, care L. J. Graham, Archt., 4885 Natural Bridge Rd., erect brick residence, Christian St., E. of Broadway; 1½ stories and basement, 39x24 ft., cost about \$10,000.

Mo., St. Louis—W. J. Schminke, 800 Hanley Rd., Clayton, erect \$50,000 residence, Fair Oaks; brick, stone and stucco, 2½ stories and basement, 100x40 ft., oak floors, concrete foundation, tile baths, slate roof, incinerator; Maritz & Young, Inc., Archts., 1116 Chemical Bldg.; excavation, Higbee Brothers Construction Co., 1011 Central Nat'l Bank Bldg.

N. C., Greensboro—Proximity Manufacturing Co., Bernard M. Cone, Pres., erect 100 operatives' cottages; 5 rooms, water, sewerage, electric lights; cost about \$150,000; J. E. Sirrine & Co., Engrs., Greenville, S. C., advise expect to be ready for bids in about 30 days.

N. C., Wilmington—Brookwood Realty Corp., Oliver T. Wallace, Pres., erect dwellings, Brookwood.

Okla., Oklahoma City—W. B. Roberts erect 4 brick dwellings, 914-20 W. Hill Ave.; total cost \$18,500.

Okla., Tulsa—C. H. Terwilleger, Kennedy Bldg., erect stucco residence, 2421 S. Trenton Ave.; cost about \$10,000.

Okla., Tulsa—Sidney Powers, Petroleum Bldg., erect \$18,500 residence, 1120 W. 24th St.; 2 stories, brick.

Okla., Tulsa—Neal Baker, 1311 E. 15th St., erect \$11,500 residence, 1421 S. Guthrie Ave.; 2 stories, brick.

S. C., Gaffney—J. Yancy McCraw, care freight office, Southern Rwy., plans residence, S. Logan and Montgomery Sts.

S. C., Gaffney—Chas. W. Cooksey, care Carroll & Myers Co., plans residence, S. Logan and Montgomery Sts.

S. C., Spartanburg—Beaumont Manufacturing Co., D. L. Jennings, Pres.-Treas., has permit for 20 five-room dwellings; probably erect total of 40 to 50 dwellings.

Tex., Austin—Stacy Realty Co., 123 N. Seventh St., erect 4 dwellings; stucco and brick veneer, 1 and 2 stories, concrete foundations, oak and edge grain pine floors, asbestos shingle roofs, built-in features; Roy L. Thomas, Archt., Littlefield Bldg.

Tex., Beaumont—Chalson Townsite Co., 309 Gilbert Bldg., erect 10 dwellings; frame, 4 rooms, cost \$2000 each.

Tex., Boerne—Willard Simpson, care W. E. Simpson & Co., Struct. Engrs., Natl. Bank of Commerce Bldg., erect Spanish ranch house type residence; stone veneer, 1 story, Mission tile roof; Robt. B. Kelly, Archt., Travis Bldg., both San Antonio.

Tex., Burnet—Vert Gibbs erect residence.

Tex., Fort Stockton—Mrs. G. W. Rose erect frame and stucco residence; 1 story, 48x50 ft., oak floors, concrete foundation, tile roof; about ready to start work. See Want Section—Building Material and Equipment.

Tex., Fort Worth—J. S. Pool, 2723 Harrison St., erect 10 dwellings, Factory Place addition; cost \$5000 each, 5 rooms; plans 15 additional dwellings.

Tex., Fort Worth—T. F. Martin, 100 Penn St., erect \$27,000 brick and concrete residence, 900 Alta St.

Tex., Houston—J. M. Edwards, 706 E. 8½ St., erect 7-room residence, Norhill Blvd. and Seventh St.

Tex., Houston—H. Green erect 2 brick veneer bungalows, 2305-07 Cleburne St., Washington Terrace; total cost \$16,000.

Tex., Houston—W. A. Moore, 1704 Houston St., erect 1-story residence, Eastwood; Chas. P. Jones & Co., Archts., Binz Bldg., completed plans.

Tex., Houston—W. R. Fulton erect two 12-room frame dwellings, 634 E. 11½ St. and 2422 Hazard St.; total cost \$18,500.

Tex., Lockney—Stokes & Shields, P. O. Box 29, erect 2 brick veneer dwellings.

Tex., Mercedes—Clarence F. Archer and J. C. Deyo, care Archer-Deyo Nash Co., erect 2 dwellings, S. Texas Ave.; cost \$6500 each.

Tex., Mercedes—Mrs. Lorraine W. Allen, St. Louis, Mo., has low bid at \$16,750 from Walter F. Chambers, San Benito, for Spanish type residence; R. Newell Waters, Archt., Weslaco.

Tex., Odessa—Pure Oil Co., Wabash Ave. and Wacker Dr., Chicago, Ill., erect number employees' dwellings; also provide office space.

Tex., Peterson—Boss Peterson receives bids Nov. 21 for Spanish type residence; hollow tile and stucco, 1 story, tile roof; separate bids for plumbing, heating and wiring; Morris & Noonan, Archts.-Engrs., Builders Exchange, San Antonio.

Tex., San Antonio—Francis Corrigan erect \$18,000 English type residence; Olmos Park Estates; Albough & Steinbomer, Archts., 941 Austin St.

Tex., San Antonio—Dr. P. M. Keating, Medical Arts Bldg., erect residence, Olmos Park Estates; Richard Vander Straten, Archt., Travis Bldg.

Tex., San Antonio—L. D. Ormsby, 257 S. St. Marys St., erect Spanish type residence, stories, 6 rooms, cost \$30,000; Atlee B. and Robt. M. Ayres, Archts., Bedell Bldg.

Tex., San Antonio—Mrs. A. Bozarth, Devine Road, erect 2 dwellings, 111 Park Hill Drive and 447 Rosewood Blvd.; brick veneer and rock, 2 stories; total cost \$25,000.

Tex., San Antonio—H. C. Thorman Co., 125 E. Travis St., erect \$45,000 Spanish type residence, Olmos Heights; frame and stucco, 2 stories, 10 rooms, tile roof and floors; Atlee B. and Robt. M. Ayres, Archts., Bedell Bldg.

Tex., Turkey—C. C. Broyles, care Woolridge Lumber Co., erect 2 dwellings, B. & B. addition.

Tex., Wichita Falls—Mytinger & Walker, Harvey-Snyder Bldg., erect \$10,000 dwelling, Park Place.

Tex., Wichita Falls—M. Johnson plans \$50,000 residence.

Tex., Wichita Falls—F. W. Fisher erect \$20,000 residence, Spymour Rd.

Government and State

D. C., Washington—Following contractors estimating on \$500,000 women's memorial building, bids to be opened Dec. 1 at room 1613, Navy Bldg., by Office Public Buildings and Public Parks of National Capitol, U. S.

Grant, 3d, Director: Kaufman-Snyder, Inc., 51 E. 42d St.; English Construction Co., 15 W. 91st St., both New York; Eastern Engineering Corp., 26 Court St., Brooklyn, N. Y.; Devault & Deitrick, Canton, Ohio; F. W. Mark Construction Co., Commercial Trust Bldg.; Sinclair & Grigg, 1518 Walnut St., both Philadelphia, Pa.; Murch Brothers Construction Co., Rwy. Exchange Bldg., St. Louis, Mo.; Skinner & Garrett, 1416 F St.; James Stewart & Co., Evans Bldg.; Wm. P. Lipscomb, Dist. Natl. Bank Bldg.; P. J. Carlin Construction Co., Barr Bldg.; Federal Fireproofing Co., 1001 K St., all Washington, D. C.; Virginia Engineering Co., 1102 Jefferson Ave., Newport News, Va.; P. C. Streett Engineering Co., 404 St. Paul St., Baltimore, Md.; W. P. Thurston Co., Richmond, Va.; W. F. Martens, Rochester, N. Y.; Rust Engineering Co., 311 Ross St., Pittsburgh, Pa.; Trowbridge & Livingston, Archts., 527 Fifth Ave., New York. See Want Section—Building Materials and Equipment.

Miss., Jackson—Hinds County Board of Supervisors receives bids Dec. 7 for fireproof armory for National Guard; cost \$60,000; rein. concrete and brick, 2 stories, concrete foundation, built-up composition roof, concrete and wood floors, struct. steel, misc. iron; plans and specifications from Frank P. Gates, Archt., Edwards Bldg.

Mo., Jefferson City—State Highway Commission of Missouri, T. H. Cutler, Ch. Engr., receives bids Nov. 22 to clear site for \$350,000 State Highway Dept. office building; structure to be white stone, 3 stories and basement with provision for additional story, 165x70 ft. columns; Egerton Swartout, Archt., 18 W. 34th St., New York.

W. Va., Williamsburg—Following contractors estimating on post office and courthouse, bids opened Dec. 8 by Treasury Dept., Washington, D. C.: A. C. Samford, Shepherd Bldg.; Algernon Blair, 11 S. Lawrence St., both Montgomery, Ala.; Landes Construction Co., Inc., Frankengerger Bldg., Charleston, W. Va.; English Construction Co., 15 W. 91st St., New York; Jones Bros. & Co., Box 338, Wilson, N. C.; D. D. Thomas & Son, 463 N. Dunlap St., Memphis, Tenn.; Fred R. Comb Co., 2113 Chicago Ave.; W. D. Lovell, 1415 Eighth St. S. E., both Minneapolis, Minn.; Chas. Weitz Sons, 713 Mulberry St., Des Moines, Iowa; Boone, Eason & Wood, Law and Commerce Bldg., Bluefield, W. Va.; Devault & Deitrick, Massillon Rd., Canton, Ohio; Consolidated Engineering Co., Inc., St. Paul and Franklin Sts.; B. H. B. Ennis, Jr., 1923 Thirty-first St.; Columbia Engineering Co., Equitable Bldg., all Baltimore, Md.; Thos. W. Cissel, Bethlehem, Pa.; Frank E. Hartman Co., National Bank Bldg.; King Lumber Co., both Charlottesville, Va.; Virginia Engineering Co., Inc., 1102 Jefferson Ave., Newport News, Va.; A. M. Lundberg, 208 N. Broadway; Wm. MacDonald Construction Co., Syndicate Trust Bldg., both St. Louis, Mo.; D. J. Phipps, Boxley Bldg., Roanoke, Va.; H. Herfurth, Jr., Inc., Alexandria, Va.

Hospitals, Sanitariums, Etc.

Ala., Montgomery—Marx & Co., 602 First Natl. Bank Bldg., is offering \$380,000 6 per cent first mortgage serial gold bonds to fund present indebtedness of Montgomery Memorial Hospital, Inc., and for raising additional funds for additional buildings and improvements; latter include \$100,000 addition and \$10,000 laundry; Okel & Cooper, Archts., Bell Bldg.

Ark., Harrison—Boone County Medical Society interested in office and hospital building.

Ga., Augusta—City has low bid for \$150,000 nurses' home, University Hospital, from Claussen-Lawrence Co., 1394 Gwinnett St.; Scroggs & Ewing, Archts., Southern Finance Co. Bldg.

Ga., Marietta—Dr. W. E. Benson is president of group receiving bids for hospital and doctors' building, Cherokee and Dobbs St.; 2 stories and basement, 42x60 ft. with 38x54-ft. wing, brick veneer, marble trim, hardwood floors, tile promenade roof, concrete columns and beams in front, built-up roof; remodel 40x56 ft. frame building; incinerator, 35 beds, Warren Webster modulation system of steam heat, special hospital appliances; Silas D. Trowbridge, Archt., Forsyth Bldg., Atlanta; following contractors estimating: Fred Saunders, McNeel Lumber Co., both Marietta; L. A. Stow, 83 Marietta St.; C. W. Bernhardt, 174 Hunnicutt St., both Atlanta.

Miss., Meridian—Dr. S. H. Hairston, 2310 Poplar Springs Road; plans \$100,000 hospital; fireproof, 3 stories, 36 rooms, clinical laboratory, X-ray and radium depts., maternity section, etc.; P. J. Krouse, Archt.

Miss., Meridian—East Mississippi Hospital for Insane erect several buildings. Address The Supt.

Miss., New Albany—New Albany Hospital, Dr. C. M. Speck, plans to start work by Dec. 1 on \$20,000 hospital.

N. C. Huntersville—Mecklenburg Sanatorium, R. Neal Hood, Chmn., Board of Managers, Charlotte, may erect children's ward. Okla., Guthrie—Methodist Episcopal Hospital erect \$250,000 addition; 250 to 300 beds; E. L. Gahl, Archt., S. W. Natl. Bank Bldg., Oklahoma City.

Okla., Tulsa—City, Commission, Dr. D. A. Beard, Supt., Health Dept., will vote at next election on \$25,000 bonds for detention hospital.

S. C., Greenville—Greenville County probably voted \$150,000 tuberculosis sanatorium bonds; Beacham & LeGrand, Archts., 17-A North St. 8-11

Tenn., Knoxville—Tennessee School for Deaf receives bids Nov. 18 for hospital; fireproof, brick; Marr & Holman, Archts., Stahlman Bldg., Nashville. 9-15

Tex., Houston—City Council authorized engineering dept. to call for bids to improve city and county hospital system; cost about \$100,000; R. H. Spencer, Harris County Commr.; Dr. A. H. Flickwir, City Health Dept. officer.

Va., Norfolk—Protestant Hospital erect addition to children's ward; 6 private rooms and ward; to be erected on second floor of main building; Calrow, Browne & FitzGibbon, Archts., Royster Bldg.; bids in.

Hotels and Apartments

D. C., Washington—Catherine Sindberger remodel building at 1410 Eleventh St. N. W., convert into apartment house; \$15,000.

Fla., Jacksonville—Charles Grimwood erect \$12,000, 2-story, frame apartments at 2028-34 Liberty St.

Fla., Osceola—Claude Thomason purchased 104x150 ft. lot on W. Hale Ave.; plans to erect 10 or 12 apartment building.

Miss., Corinth—Hockenbury System, Inc., Harrisburg, Pa., will make survey to determine size and type hotel needed; sponsored by Chamber of Commerce.

Ga., Valdosta—Patterson Hotel, T. B. McCrocklin, Tampa, Fla., lessor; W. L. Fender and Mrs. J. C. Jones, owners; plan extensive improvements.

Miss., Bay St. Louis—Bay St. Louis Apartment Hotel Co. erect 3-story, 112x102-ft., hollow tile and cast stone trim apartment hotel; concrete foundation, tile roof, steam heat, oil burning equipment; Mason & Spori, Archts., Vincent Bldg.; bids opened Nov. 19.

Miss., Laurel—J. R. McCraw has plans by Emile M. Muehlendorff, Carter Bldg., for \$60,000, 3-story, 78½x54-ft., brick, fireproof hotel, Central Ave. and Maple St.

Mo., St. Louis—Jesse L. Woods, 615 W. Hancock St., Detroit, Mich., and Arcadia Dance Hall, St. Louis, will erect \$350,000 apartment building at Theresa Ave. and Olive St.

N. C., Charlotte—Moreity Realty Co. has permit for \$12,000, 2-story, 16-room, brick veneer apartment house at 702 Lamar Ave.

Okla., Ada—Board of Directors Chamber of Commerce promoting construction of hotel; J. C. Hynds, Sec.

Okla., Oklahoma City—J. W. Hawk start work at once on \$100,000, 3-story, brick and stone, 20-apartment building at 25th St. and Hudson Ave., to be known as Windemere Court; Hawk & Parr, Archts., Cotton Exchange Bldg.

Okla., Oklahoma City—L. B. Kerfoot and Emma I. Mead, 1225 W. 17th St., plan to erect 4-family apartment house at 816 W. 23rd St.

Okla., Tulsa—A. C. Johnson, Gen. Mgr., Illinois Life Insurance Co., 309 Natl. Bank of Commerce Bldg., reported, promoting erection \$1,000,000 hotel, S. Main and Seventh Sts.; 10 stories, 193 rooms. Wires: "No deal closed for \$1,000,000 hotel; premature newspaper item."

Okla., Wewoka—Aldridge Hotel Co. receiving bids on \$50,000, 4-story, 40-room addition; A. C. Davis & Son, Archts., Shawnee. 10-6

Tenn., Elizabethton—Robinson Brothers, Asheville, reported, purchased 75x150 ft. lot on Sunset Hill, contemplate erecting 3-story, 30-room hotel.

Tenn., Nashville—John Calhoun has plans by Tisdale, Stone & Pinson, for \$225,000, 4½-story co-operative apartment building in Belle Meade Park, providing 18 apartments ranging from 4 rooms and bath to 8 rooms and 2 baths; brick and stone with timbered eaves, front turret and gabled roof.

Tex., Goose Creek—Hotel Committee entered contract with Hockenbury System, Inc., Harrisburg, Pa., to conduct campaign

to raise \$110,000 for erection of hotel; promoted by Tri-City Chamber of Commerce, W. O. Stephens, Mgr.

Tex., Houston—Clarence Chambers erect \$12,000, 36x52-ft., 2-story and basement, brick apartment building, 29th St. and Collis Ave.

Tex., Houston—H. Green purchased property on Chartres between McLennan and Hadley Sts.; will erect four 2-story, brick veneer apartment buildings, cost \$65,000.

Tex., New Braunfels—Joe Abrahams, Adolph Henne, Emil Fischer, members of committee to raise \$75,000 toward construction of \$225,000 hotel; Chamber of Commerce promoting. 11-10

Tex., Presidio—H. D. Frankfurt, Leonard Cross, Bob Bledsoe plan to organize Presidio Hotel Corp.; erect \$60,000 hotel, 3 stories, stone, tile and stucco, 43 rooms, 8 stores.

Tex., San Angelo—Mrs. Cora C. Dalton, Oklahoma City, planning to erect 150-room hotel on W. Harris St.; 3 stories, brick, lot 50x190 ft.

Tex., Sonora—S. E. Ross, Fort Stockton, reported, contemplates erecting hotel building; Chamber of Commerce, care A. C. Elliott, making survey to determine needs.

W. Va., Charleston—Hockenbury System, Inc., Harrisburg, Pa., completed financing, raising \$610,000 for construction of 13-story hotel at corner Capitol and Washington Sts.; 200 rooms each with bath, fireproof, lobby and store rooms on ground floors; corporation to be known as Community Hotel Corp. A. W. Cox, 722 Capitol St. and W. B. Geary of Diamond Shoe and Garment Co., Capitol St., interested; will be operated by American Hotels Corp., 25 W. 45th St., New York; architect not yet chosen. 10-6

Miscellaneous

Fla., Miami—Dade County Humane Society erect \$20,000 home for dogs.

Fla., Miami Beach—Miami Beach Woman's Club erect \$10,000 clubhouse at municipal golf course.

Ga., Atlanta—Ansley Park Golf Club, Wm. M. Hunt, Pres., Fourth Natl. Bank Bldg., having plans prepared by Wm. J. J. Chase, 140 Peachtree St., for \$25,000 frame addition to building.

Ga., Savannah—Order of Railway Conductors, L. E. Sheppard, Pres., Cedar Rapids, Iowa, probably erect clubhouse for guests.

Tenn., Chattanooga—Chattanooga Baseball Club has plans in progress by James S. Gauntt, Hamilton Natl. Bank Bldg., for \$100,000 concrete and structural steel baseball stadium at O'Neal and Third Sts.

Tex., Dallas—Mrs. G. C. Frank has \$15,000 permit for addition and repairs at 520 Terry St.

Tex., Dallas—Lake Shore Club, Jack B. Carter, Sec.-Treas., 606 S. Brighton St., plans to erect \$70,000 clubhouse on shore of White Rock Lake.

Tex., Fort Worth—J. J. Langever, 2134 W. Seventh St., has permit for \$20,000 tourist camp at 2134-S W. Seventh St.; include 20 camps, of which 10 will be 2 stories, with garage on first floor, sleeping quarters above.

Tex., Houston—First High School Band of Houston plans erection of clubhouse on 3-acre site; H. L. Mills, Bus. Mgr., School Board.

Va., Richmond—Charles A. Somma, 528 N. Second St., and associates plan \$100,000 stadium at State Fair Grounds to seat 12,000 people.

Railway Stations, Sheds, Etc.

N. C., Greensboro—Southern Railway Co., B. Herman, Ch. Engr., Engineering Dept., Washington, D. C., plans to erect brick freight station; composition roof, concrete floors.

Schools

Ala., Auburn—Phi Delta Theta Fraternity, Alabama Polytechnic Institute, receives bids Nov. 28 on \$30,000, 2-story and basement, brick veneer frat house; limestone trim, slate roof, hardwood floors, steam heat; R. Kennon Perry, Archt., Wynne-Claughton Bldg., Atlanta, Ga.

Ala., Talladega—Judge S. C. Oliver, Chmn. Executive Committee, Alabama School for the Deaf and Blind, receives bids Dec. 8 for Dormitory and School Building, Alabama School for the Deaf, including heating, plumbing and wiring, and for School Building and Gymnasium Building for Alabama School for the Blind, including heating, plumbing and wiring; plans and specifications from R. H. Hunt Co., Archts., James Bldg., Chattanooga, Tenn.

Fla., Miami—Board of Public Instruction

of Dade County, Ray L. Hamon, Director of Building Constr., has plans and specifications by Robertson & Patterson, Calumet Bldg., for 5-room school at Kendall; same Archts. preparing plans for 28-room Arch Creek School at Miami Shores; both reinforced concrete and tile; call for bids about Dec. 1st. 11-3

Ga., Athens—Lucy Cobb Institute, Dr. W. F. Hollingsworth, Pres., erect Rutherford Hall, cost \$100,000; 3 stories and basement, reinforced concrete.

Ga., Athens—Clarke County Board of Education, T. N. Gains, Supt., voted to erect consolidated school.

Ga., Atlanta—City Board of Education, R. R. Ritchie, Asst. Supt., 41 Walker St., will have plans ready for bids about Nov. 25 for additions to Wm. A. Bass, Joe Brown and O'Keefe Jr. High Schools, cost \$150,000; reinforced concrete and brick, concrete floors, built-up roof, stone trim, steam heat; G. Lloyd Preacher & Co., Archts.-Engrs., Wynne-Claughton Bldg. 10-20

Ga., Rockingham—Rockingham School Dist. Trustees plan school building; vote Dec. 5 on bonds.

Ga., Tifton—Tifton School Trustees have plans in progress by Daniell & Beutell, 307 Healey Bldg., Atlanta, for \$50,000, 1-story, brick veneer High School building; U-shaped, 210x112 ft., concrete foundation, maple floors, composition shingles and built-up roof; address equipment proposals to H. F. Gibbs. 11-10

Ky., Morehead—Morehead Normal School Board of Regents erect \$160,000 gymnasium and auditorium; latter to seat 1500.

La., New Orleans—Wm. R. Burk, Archt., Balter Bldg., receives bids Dec. 6 for 2-story, brick and cast stone trim, 8-room parochial school, St. Bernard Ave., for Our Lady of the Sacred Heart Catholic Church, Rev. Anselm Maenner, Rector; reinforced concrete foundation, structural steel and wrought iron, electric wiring, steam heat, oil burner, composition and tile roof, steel sash, tile floors. 11-10

La., New Orleans—A. S. Montz, 740 Poydras St., prepared plans for \$250,000, 4-story Dominican Convent.

La., Sarepta—Webster Parish School Bd., Minden, call election in Sarepta School Dist. on \$70,000 bonds for new school building.

Md., Annapolis—St. John's College, Dr. Enoch B. Garey, Pres., purchased old Pinkney House, St. John's St., and will remodel; also reported contemplating purchase old Peggy Stewart House.

Miss., Crystal Springs—Copolah County Election Commissioners call new election on \$75,000 bonds to augment \$150,000 already voted; election called for October 27, but due to an error will be readvertised; Claude H. Lindsley, Archt., Jackson, preparing plans for \$225,000 building. 10-27

Miss., Laurel—School Board receives bids Nov. 18 at office of Mayor, City Hall, for school for negroes; plans, etc., from R. H. Watkins, Supt. of Schools.

Miss., University—University of Mississippi Law School, Dean T. C. Kimbrough contemplates erecting \$150,000 building.

Mo., Holden—Holden School Dist. Trustees erect building to replace structure burned at loss of \$30,000.

Mo., Springfield—Board of Education outlined bond issue of \$1,747,500 to rebuild public school system; Charles A. Smith, Archt. 800 Finance Bldg., Kansas City, made report on conditions and new buildings needed.

Mo., St. Louis—Washington University School of Medicine, Dean W. McKim Marriott, announced plans for \$1,000,000 neurological institute, on south side Scott Ave.; tentative state.

N. C., Aulander—Bertie County Board of Education, Windsor, erect \$40,000 school.

N. C., Boone—Watauga County Board of Education, Smith Hagaman, Supt., plans \$10,000 school at Meat Camp.

N. C., Charlotte—Mecklenburg County Board of Education, Frank A. Edmondson, Supt., erect \$20,000, 6-room school in Providence Township.

N. C., Charlotte—School Board probably open bids Nov. 24 for \$100,000 Myers Park Grammar School; furniture and equipment cost additional \$7000; contain 12 classrooms, principal's office, cafeteria in basement, etc.; Charles C. Hook, Archt., Johnston Bldg. 9-29

N. C., Durham—Board of Education, L. H. Barbour, Supt., applied for \$80,000 loan; \$40,000 for new building on Hope Valley Road; \$25,000 school on Hillsboro Road, etc.

N. C., Gastonia—Gaston County Board of Education, F. P. Hall, Supt., will borrow

\$68,500 for school buildings to be apportioned as follows: Mount Holly, \$15,000; Dallas, \$8500; Gastonia, \$25,000; Bessemer City, \$20,000.

N. C., Kinston—Lenoir County Board of Education will borrow \$117,000, erect addition to Contentment Neck School, \$15,000; addition to Moss Hill School, \$15,000; addition and alterations to La Grange School, \$35,000; new school at Institute, \$52,000.

N. C., Leaksville—Rockingham County Board of Education, Wentworth, receives bids Nov. 29 for 10-room and auditorium colored school; plans and specifications at office Jas. W. Hopper.

N. C., Leicester—Buncombe County Board of Education, A. C. Reynolds, Supt., Asheville, considering erection \$100,000 high school.

N. C., Rockwell—School Board soon have plans by Percy Bloxam, Salisbury, for \$40,000 school building; brick walls, composition roof, wood floors, steam heat.

N. C., Sandy Ridge—Stokes County Board of Education, Danbury, probably let contract this week for school building.

Okla., DePew—Board of Education receiving bids for \$20,000, 1-story school building; heating and plumbing in general contract; Love & Kerr, Archts., 204½ E. Third St., Tulsa.

Okla., Konawa—Albert S. Ross, Archt., Ada, preparing plans for \$60,000, 1-story, brick and concrete High School; built-up asphalt roof, pine finish, steam heat, metal lath, steel sash and waterproofing.

Okla., Norman—Sorey & Vahlberg, Archts., Braniff Bldg., Oklahoma City, preparing plans for \$250,000 Memorial Union Building, University of Oklahoma.

Okla., Perry—Board of Education, Dr. O. W. Boyer, Pres., soon call \$47,000 bond election for gymnasium and auditorium addition to High School building.

Okla., Shawnee—Oklahoma Baptist University, Dr. W. W. Phelan, Pres., contemplates erecting \$200,000 girls' dormitory.

Okla., Tulsa—Benedictine Sisters have plans in progress by F. W. Redlick, for \$100,000, brick, stone and reinforced concrete dormitory.

Okla., Wyandotte—Board of Education receives bids Nov. 22 on \$15,000, one-story, brick and tile school; R. A. Swartz, Archt., Miami. 10-27

Tenn., Germantown—Shelby County Board of Education, Memphis, soon let contract for gymnasium and lunchroom addition to school; cost \$15,000.

Tenn., Lavinia—Board of Education rebuild 2 schools, noted burned.

Tenn., Lewisburg—Marshall County voted \$90,000 bonds for school purposes. Address County Board of Education.

Tenn., Madisonville—Monroe County Board of Education will erect schools at Natchee and Mount Vernon.

Tenn., Memphis—Shelby County Board of Education probably let contracts this week for auditorium buildings at Whitehaven and White Station schools, cost \$175,000; also planning \$200,000 building at Hollywood.

Tenn., Memphis—Phi Kappa Sigma fraternity has permit for \$10,000 building at Southwestern College.

Tenn., Memphis—Board of Education received bids Nov. 15 for \$500,000 Technical High School building; Harker & Cairns, Archts., 123 S. Court St.

Tenn., Nashville—Board of Education receives bids Nov. 28, at Hume-Fogg High School building, for school building on 24th Ave. North; plans and specifications from McKissick & McKissick, Archts., Morris Memorial Bldg.

Tenn., Pulaski—Board of Trustees of Martin College planning construction of administration building, gymnasium and swimming pool; Rev. George A. Morgan, Pres.

Tex., Clinton—School Board, Max Hearst, Sec., P. O. Drawer A, Houston, receives bids Dec. 1 for high school for Common School Dist. No. 16; 2 stories, brick, reinforced concrete and stone; plans and specifications at office John McLelland, Archt., 605 West Bldg., Houston. 10-27

Tex., Longview—Longview Independent School District, Harry Turner, Pres. Board of Trustees, receives bids Nov. 21 for \$100,000, 2-story, 190x63 ft. with auditorium extension in rear, brick reinforced concrete, stone, fireproof high school building; Elmer G. Withers, Archt., Holmes Bldg., Fort Worth.

Tex., Sherman—Austin College, Dr. T. S. Clyde, Pres., erect administration building.

Tex., Troup—Board of Trustees Troup School District will call \$12,000 bond election for additional rooms and equipment at white and negro schools.

Tex., Troup—Troup School Dist. votes Nov. 29 on \$12,000 bonds. Address Dist. School Trustees.

Va., Dyke—Blue Ridge Industrial School, Rev. George P. Mayo, Supt., plans to erect \$8000 chapel and \$15,000 industrial building.

Va., Luray—Page County Board of Education, Harry B. Hanger, Supt., plans \$200,000 high school.

Va., Pennington Gap—Lee Baptist Institute plans to rebuild boys' dormitory, recently burned.

Va., Richmond—C. P. Walford, Clerk and Supervisor of Richmond Public Schools, receives bids Nov. 25 for additions to Armstrong Colored High School; separate proposals for (a) erection; (b) addition to present warm air heating system; (c) new steam system; plans and specifications from Charles M. Robinson, School Archt., Times-D'patch Bldg.

W. Va., Shepherdstown—City defeated \$75,000 High School bonds; address Board of Education. 11-3

Stores

Ala., Birmingham—H. B. Wheelock, Archt., Steiner Bldg., probably let contract this week for remodeling brick building, preparatory to widening S. 20th St. between Seventh and Tenth Aves., South.

Ala., Mobile—Capt. R. H. Oswell, of Oswell Towing & Timber Co., 858 E. Broad St., will erect \$100,000 building to house drug store, grocery, tire repair shop, filling station and cafes.

Ark., Lamar—Ragon-Hardwick Co. purchased lot for proposed hardware store.

Ark., Little Rock—I. H. Mack, 1012 W. Sixth St., has permit for \$10,000 building at 1921 W. Ninth St.

D. C., Washington—B. L. Edmonston has permit to install new show windows, remove stairway, make repairs, etc., at 610 13th St. N. W.; \$10,000.

Md., Baltimore—Bentley & Melvin, 324 W. Baltimore St., leased 5-story building at 1024 N. Charles St.; will make extensive alterations.

Md., Baltimore—S. Goldheims and Sons, Baltimore and Howard Sts., leased building at 107 E. Baltimore St.; will make extensive alterations.

Miss., Canton—Mrs. Philip Cattin purchased brick building at Center and Union Sts.; plans to remodel.

Miss., McComb—McComb Realty Co. erect 2-story brick store building.

Mo., Doniphan—L. P. Whitmeit proposes to erect store to replace burned structure and desires estimates on constructing 1-story, 50x100 ft. building, brick wall, concrete roof, steel supports, metal ceiling; plans not yet drawn. 10-10

Mo., St. Louis—Famous-Barr Co., Oliver, Locust, Sixth and Seventh Sts., take over 4 additional floors in present building; put in additional elevators and raise present ones, escalators between various floors, new stairways, remove partitions, install new floors, rearrange sprinkler system, water system, etc. 11-3

N. C., Asheville—Susquehanna Furniture Co., S. H. Friedman, Propr., 26 Broadway, leased Smathers buildings at 15 Broadway and 24 and 26 N. Lexington Ave.; will remodel.

N. C., High Point—Rose Furniture Co., English St., erect store on English St.

Okla., Clinton—H. C. Bradford receiving bids for 1-story business building; steel truss, steel sash, built-up roof; E. M. Rich, Archt.

Okla., Oklahoma City—George E. Clark, 1316 W. 15th St., and Earl N. Sapp plan to erect building to house drug store, grocery and tailor shop at 2400 W. 21st St.

Okla., Oklahoma City—Keene C. Burwell, First Natl. Bank Bldg., having plans prepared by C. L. Monnot, Magnolia Bldg., for \$75,000, 2-story building, 10th and Robinson Sts. Address Architect.

Okla., Oklahoma City—V. V. Harris, Braniff Bldg., will have plans completed in about 30 days for \$26,000, 80x70-ft., one-story store building, Ninth and Hudson Sts.; brick, concrete, fireproof, concrete roof. Address R. L. Baldwin, Archt., Magnolia Bldg. 10-10

Okla., Oklahoma City—R. C. Cavitt have plans ready about Nov. 20 for \$20,000 brick and concrete store building; Sorey & Vahlberg, Archts., Braniff Bldg.

Tenn., Nashville—P. J. Stump, Sam Marcus and Fred Goldner, 237 Fourth Ave. N., install new front and make other improvements to store building at 215-17 Fifth Ave., North; \$30,000; leased to W. T. Grant Co.

Tex., Coleman—J. S. Rogers start work at once on building to be occupied by J. L. Strother Grain Co., at Live Oak and Colorado Sts.

Tex., Dallas—R. A. Horton, 304 W. Davis St., has permit for \$11,500 brick addition at 300-8 W. Davis St.

Tex., Lufkin—Campbell Furniture Co. planning to erect 2-story, brick store building.

Tex., Lufkin—H. G. Morrow, Pres. of Albany Hotel Apartments, Inc., Blabee Bldg., advises regarding \$3,000,000, 21-story apartment hotel contemplated at Ocean and Monroe Sts.; "Plans failed to materialize; project abandoned." 2-17

Tex., Mission—Strable & Ewers erect 25x75 ft., brick business building to be occupied by Valley Gas Co.; A. H. Woolridge, Archt., McAllen.

Tex., San Antonio—Z. D. Bonner, Commercial Natl. Bank, has plans in progress by Phelps & Dewees, Gunter Bldg., for 1-story, reinforced concrete, brick, cast stone trim store building, Main Ave.

Tex., San Antonio—R. C. Wright, 226 E. Magnolia Ave., purchased 100-ft. frontage on Main Ave., between Travis and Martin Sts.; 30 ft. will be cut from front of property to allow for street widening, remodel present structure into commercial building.

Tex., San Antonio—Matilda Slizondo, 701 S. Laredo St., has plans by L. Harrington Co., Builders Exchange Bldg., for 5 stores and filling station at Laredo and Brazos Sts.; 1 story, 62x120 ft., concrete frame, hollow tile and stucco.

Tex., San Antonio—G. W. Mitchell, Builders Exchange, and Lake Robertson erect \$10,000 store on S. Hackberry St.

Theaters

Md., Baltimore—James L. Kernan Co., Fred C. Schanberger, Pres.-Mgr., purchased Garden Theater; redecorate and refurnish; no contracts let.

N. C., Charlotte—L. H. Asbury, 1514 E. Fourth St., preparing plans for \$25,000 theater and community center, Beatty's Ford Rd.; brick walls, composition roof.

Tex., Jacksonville—East Texas Theaters, Inc., J. C. Clemens, Pres. and Gen. Mgr., Beaumont, receives bids Dec. 8 for \$75,000, 48.5x132 ft., reinforced concrete, brick and steel theater building; reinforced concrete foundation, hollow tile, common and pressed brick interior, iron work, structural steel, composition roof; Emile Well, Inc., Archts., Whitney Bank Bldg., New Orleans, La.; following contractors propose to bid: Charles F. Law, Beaumont; C. W. Marshall, Jacksonville, and Jos. Plessier, Marshall. 11-10

Warehouses

Ala., Huntsville—Dixie Warehouse and Storage Co. plans to erect additional unit to warehouse on W. Clinton St.

Ga., Fitzgerald—First National Bank having plans prepared for building on Central Ave.; house wholesale grocery company.

Ky., Louisville—Louisville Public Warehouse Co., N. W. Brook and Main Sts., erect \$30,000 frame warehouse, 1001 W. Hill St.

Miss., Jackson—Koenigman Electric Co., 125 S. State St., has plans in progress by Claude H. Lindsley, Lamar Life Bldg., for \$20,000, 1-story, brick warehouse.

Miss., Jackson—Claude H. Lindsley, Archt., Lamar Life Bldg., preparing plans for \$15,000, 1-story, brick, 60x90 ft. warehouse for Cabell Electric Co., S. Farish St.

Miss., Jackson—Mississippi Farm Bureau Cotton Assn. has preliminary plans in progress for \$35,000, 1-story, 75x257 ft., brick and stucco warehouse and office building; Claude H. Lindsley, Archt., Lamar Life Bldg.

Miss., Union—W. L. White Hardware Co. started work on sheet-iron warehouse.

N. C., Durham—J. A. Murdock erect \$12,000 storage warehouse at Norfolk and Western crossing.

Tex., Dallas—L. and H. Abrams erect \$25,000, 2-story, brick warehouse at 1601 Ross St.

Tex., Dumas—W. R. Freeman, Stratford, leased Anderson Building; will remodel for theater.

Tex., Houston—Texas & New Orleans Railroad has permit for \$15,940, 2-story, iron and steel warehouse at Wood and Walnut Sts.

Tex., Houston—Universal Terminal Warehouse Co., Samuel P. Fleming, Vice-Pres. and Gen. Mgr., 1006 Washington Ave., commissioned R. D. Steele, prepare plans for 2-story addition to warehouse at Washington Ave. and Elder; \$150,000, 150x257 ft., brick and reinforced concrete, sprinkler system.

BUILDING CONTRACTS AWARDED

Association and Fraternal

Ky., Paducah—Young Men's Christian Assn., Dr. Vernon Blythe, Chmn. Bldg. Comm., let contract for \$69,000 first unit of building to E. J. Roper & Son; gymnasium, swimming pool, shower baths, drying, locker, dressing and apparatus rooms, filtering plant, sterilization equipment, heating plant; completed structure to cost \$210,000; G. Tandy Smith, Archt., Guthrie Bldg. 8-18

Tex., Fort Arthur—Robt. Voigtlander, 1612 Miller St., Houston, has orn. iron work contract for \$200,000 Masonic Temple; Wm. B. Ittner, Inc., Archt., 408 Board of Education Bldg., St. Louis, Mo.; Hickey & Harrington Construction Co., Contr., Bldrs. Exchange, San Antonio. 11-10

Bank and Office

Md., Baltimore—United States Fidelity & Guaranty Co., Calvert and Redwood Sts., let contract to J. Henry Miller, Inc., Franklin and Eutaw Sts., for 5 additional stories to 7-story office building and increasing rear portion to 12 stories; cost about \$800,000; fireproof, steel and concrete, 49x57.6 ft., mastic finish floors, slag roof; Wyatt F. Doeelman, Struct. Engr., 516 N. Charles St.; Henry Adams, Mech. Engr., Calvert Bldg. 11-3

Mo., St. Louis—Following have sub-contracts for \$2,500,000 Missouri Pacific R. R. Co. office building: Aetna Bricklaying and Construction Co., Syndicate Trust Bldg.; Northwestern Terra Cotta Co., 4417 Oleatha St.; H. Niehaus Plastering Co., Louderman Bldg.; Wright Bros., 3822 St. Anne's St.; cement work; Union Marble & Tile Co., 1117 S. Seventh St.; Spuck Iron & Foundry Co., 14th and Branch Sts., misc. iron; Ornamental Wire & Iron Co., Elliott and University Sts., elevator doors; E. A. Koenenman Electric Co., 1405 Pine St.; Western Sheet Metal Co., 4466 Finney Ave.; Insulating & Materials Co., 3450 S. Broadway, roofing; Lecoutour Bros. Stair Co., 3120 Brannon Ave., millwork; Nurre Glass Co., 3431 Michigan Ave., glazing; Shapleigh Hardware Co., Fourth St. and Washington Ave.; Synthetic Tile Co., 2627 Dayton St.; Hydraulic Press Brick Co., Central Natl. Bank Bldg., tile; Parker-Russell Mining & Manufacturing Co., 3300 Morganford Rd., tile, all St. Louis; David Lupton's Sons Co., Allegheny Ave. and Tulip St., Philadelphia, Pa., steel sash; Elmer Sigler & Co., 301 Security Bldg., Kansas City, Mo., form work; Coburn Trolley Track Manufacturing Co., Holyoke, Mass., kalameln doors; Cutler Mail Chute Co., Rochester, N. Y.; W. D. Allen Manufacturing Co., 566 W. Lake St., Chicago, Ill., fire cabinets; Wipke Lightning Rod Co., Kirkwood, St. Louis, lightning rods; Security Artsteel Products Co., 2800 E. 13th St., Kansas City, metal partitions; Indiana Drain Tile Co., Brooklyn, Ind.; plans by E. M. Tucker, Missouri Pacific architect; Mauran, Russell & Crowell, Asso. Archts., Chemical Bldg.; Humes-Deal Co., Contrs., 1416 Syndicate Trust Bldg., all St. Louis. 9-15

S. C., Anderson—Appleton Manufacturing Co. let contract to Towns and Lumber Co. for \$10,000 office building; 1 story, brick veneer; J. E. Sirrine & Co., Engrs., Greenville. 11-3

Tex., Beaumont—Way Engineering Co. has Lipman water cooling machine contract for \$600,000 Goodhue Bldg. under construction; Tisdale, Stone & Pinson, Archts.; J. S. Nichol, Engr.; managing and superintending contract, Nichol & Sneed, all 376 Crockett St., Beaumont. 7-7

Tex., Houston—W. E. Humphreys Co., Second Natl. Bank Bldg., has plastering contract for \$750,000 Houston National Bank Bldg.; Hedrick & Gottlieb, Archts., Post-Dispatch Bldg.; Don Hall Construction Co., Contr., Cotton Exchange Bldg. 10-6

Tex., Houston—Way Engineering Co. has Lipman water cooling machine contract for first unit of \$1,250,000 San Jacinto Trust Co. building; steel casements, Robt. Voigtlander; Jos. W. Northrop, Jr., West Bldg., Houston, and Alfred C. Bossom, 680 Fifth Ave., New York, Asso. Archts.; Don Hall Construction Co., Contr., Cotton Exchange Bldg., Houston. 9-29

Churches

Ga., Metter—Benson Construction Co., Augusta, has contract for brick Missionary Church; 24 rooms.

La., New Orleans—Schwall & O'Neil, 3826 Delachaise St., have masonry contract for \$100,000 Canal Street Presbyterian Church; Sam Stone, Jr., & Co., Archts., Masonic Temple Bldg.; G. E. & E. E. Reimann, Contrs., Maritime Bldg. 9-1

Md., Baltimore—St. Ambrose R. C. Church, Rev. Hugh J. Monaghan, Pastor, Park Heights and Wiley Aves., let contract to M. A. Long Co., 10 W. Chase St., for \$300,000 church; English Gothic type, Woodstock granite, limestone trim, nave seat 800, chapel 200; Maginnis & Walsh, Archts., 100 Boylston St., Boston, Mass. 9-29

Mo., Afton—Servite Fathers, 3121 W. Jackson St., Chicago, Ill., let contract to Duffner Steckner Construction Co., 119 N. Seventh St., St. Louis, Mo., for church and rectory; brick, 1 story and basement, 70x35 ft., and 1½ stories and basement, 45x35 ft., brick and concrete foundation, oak floors, Celotex; F. W. Ludewig & Co., Archts., 3115 S. Grand Ave., St. Louis. 8-25

N. C., Winston-Salem—St. Leo's R. C. Church let contract to Southeastern Construction Co., 210 W. Second St., for \$70,000 building, Angelo St.; stone, 1 story, 40x125 ft., linoleum floors, concrete foundation, slate roof, pipe organ; also erect 7- or 8-room rectory; plans by Father Michael of Belmont Abbey; vapor system heating, electrical work and plumbing not let. 11-10

Tenn., East Lake, Chattanooga—East Lake M. E. Church, J. P. Payne, Chmn., Bldg. Comm., let contract for \$30,000 building, Avenue L near 37th St., to Rogers & Leventhal, Inc., Market St.; 2 stories; R. H. Hunt Co., Archt., James Bldg., Chattanooga. 3-15

Tenn., Lavinia—Methodist Episcopal Church, South, rebuild structure noted burned; Creswell Bros., Contrs., Milan.

Tex., Amarillo—Bitting & Co., 909 Republic Bank Bldg., Dallas, is offering \$150,000 first mortgage 5½% serial bonds of \$400,000 Polk Street M. E. Church South, under construction; R. H. Hunt Co., Archt., James Bldg., Chattanooga, Tenn., and S. W. Life Bldg., Dallas, Tex.; J. Roy Smith, Asso. Archt., Blackburn Bldg., Amarillo; Christy-Dolph Construction Co., Contr., Central Bank Bldg., Dallas. 8-4

Tex., Dallas—Forest Avenue Baptist Church has \$27,000 permit for Sunday school, Peabody and Oakland Sts.; brick and concrete; Thomas & Yarbrough, Contrs., 707 N. Ervay St.

Tex., Galveston—B'nai Israel Congregation let contract at \$53,668 to J. W. Zempter & Co., 2204 B St., for rein. concrete, steel and hollow tile community center, 820 Twenty-second St.; 2 stories, 50x122 ft., terrazzo and maple floors, concrete foundation, tar and shell roof; R. R. Rapp, Archt., 417 Guaranty Bldg.; steam heating and plumbing, A. J. Warren, 2315 E. St., \$6846; electrical work, Max Levy Electric Co., 2209 C St., \$2382. See Want Section—Building Material and Equipment. 11-3

Tex., San Angelo—First Baptist Church, Rev. Elmer Ridgeway, Pastor, let contract at \$71,000 to H. H. Meyers for 3-story Sunday school; brick; R. H. Hunt Co., Archt., James Bldg., Chattanooga, Tenn., and S. W. Life Bldg., Dallas, Tex. 9-15

Tex., Tyler—First Christian Church let contract to Campbell & White, Belton, Tex., for \$70,000 building, S. Broadway; 4 stories; furnishings, equipment, etc., \$20,000; Clyde H. Woodruff, Archt., Fort Worth. 11-3

City and County

Ark., Lonoke—Lonoke County Board of Commissioners let contract to Herman & McCain Construction Co., Reigler Bldg., Little Rock, for \$270,000 courthouse; fireproof, brick, cut stone and rein. concrete, 3 stories, jail on roof, 62x216 ft.; H. Ray Burks, Archt., Home Insurance Building, Little Rock. 12-9-26

N. C., Asheville—Sterchi Brothers, 52-56 Biltmore Ave., have \$15,000 linoleum contract for \$1,800,000 Buncombe County courthouse under construction; Milburn, Heister & Co., Archts., Hill Bldg., Washington, D. C., and First Natl. Bank Bldg., Durham; Angle-Blackford Co., Contr., Amer. Exchange Natl. Bank Bldg., Greensboro. 9-15

Tex., Houston—Harris County Commissioners' Court let contract at \$31,576 to Gaught & Berry for remodeling courthouse; plumbing, Barber Plumbing Co., 1419 Page St., \$13,575; electrical work, Barden Electric & Contracting Co., 111 Main St., \$2642; R. D. Steele, Archt., First Natl. Bank Bldg. 10-27

Tex., San Angelo—Ingalls Stone Co., Bedford, Ind., has cut stone contract for \$300,000 Tom Green County courthouse; cast stone, Algonite Stone Co., 4606 Chippewa St., St. Louis, Mo.; Browne windows, Universal Building Products Co., Slaughter Bldg.; Anton F. Korn, Jr., Archt., Thomas Bldg.; Robt. O. Jameson, Engr., S. W. Life Bldg.; P. O'B.

Montgomery, Contr., 504-05 Constr. Industries Bldg., all Dallas, Tex. See Want Section—Building Material and Equipment. 10-27

Tex., Santa Anna—City Commission let contract at \$15,424 to Edgerton & Furr for city hall and fire station; face brick, 2 stories, fireproof vault; Elmer G. Withers, Archt., 1308 Dorothy Lane, Fort Worth. 10-27

Dwellings

Ala., Selma—Harry Maring, care Southern Clothing & Notions Co., erect \$30,000 residence, Lapsley St. near Parkman St.; English type; Warren, Knight & Davis, Archts., Empire Bldg., Birmingham, Ala.; Chandler C. Yonge, Asso. Archt., American Natl. Bank Bldg., Pensacola, Fla.; Rutledge & Pierson, Contrs.

Ark., Wynne—Dave Block erecting residence; 2 tile baths, oil burning furnace; Estes W. Mann, Archt., Memphis, Tenn.

Ark., Wynne—W. W. Robinson remodeling residence; Estes W. Mann, Archt., Memphis, Tenn.

D. C., Washington—Burrows & Donovan have hot water heating contract for dwellings, 6401-11 Eighth and 6400-10 Seventh Sts., for Wardman Construction Co., Inc., 1437 K St. N. W.; electrical work, E. C. Ernst, 1634 14th St.; plumbing, E. E. Adamson, 6101 Fourth St. N. W.; plans and construction by owner. 11-10

Fla., Coral Gables, Miami—T. C. Taylor, 2275 W. 13th Ave., erect \$15,000 Spanish type residence and garage, 500 block Alhambra Circle; owner builds.

Fla., Davenport—Mrs. Annett E. Graver erect residence, Cypress St. and Miami Ave., Poinsettia Hills; stucco, tile roof and bath, hardwood floors, and finish walls, 6 rooms; Davenport Lumber & Supply Co., Contr.

Fla., Jacksonville—A. L. Powell, 1418 Burnett Bldg., erect \$17,000 brick veneer residence, Challen St. near Oak St.; 2 stories; W. T. Hadlow, Contr., 32 W. Forsythe St.

Fla., Jacksonville—E. L. Filby, 1461 Myra St., erect \$10,000 residence, Pine St. near Edgewood St.; brick veneer, 2 stories; J. B. Cox, Contr., 3102 Liberty St.

Fla., Jacksonville—Frank Boggs, 1646 Liberty St., started work on brick veneer residence, Greenwood Ave.; cost about \$10,000; 2 stories, 30.10x29.6 ft., hardwood floors, concrete foundation, asphalt shingle roof; plans and engineering by owner; Campbell-Wheeler Co., Contr., 407 Barnett Natl. Bank Bldg. See Want Section—Building Material and Equipment. 11-10

Fla., Jacksonville—Anna A. VanGlahn erect 3 frame dwellings, 868-78 Eaverson St.; 2 stories, cost \$3500 each; B. S. Tracey, Contr.

Ga., Atlanta—Hugh Richardson, Jr., 66½ N. Forsyth St., erect shingle residence; 2 stories and basement, hardwood floors, composition roof, steam heat; R. S. Monday, Archt., Norris Bldg., Atlanta; S. G. Walker, Contr., Hapeville.

Ga., Atlanta—Chas. M. Marshall, 16 Brookhaven Drive, let contract to T. C. Wesley, Candler Bldg., for alterations and addition to residence; frame, 2 stories, oak floors, brick foundation, tile roof, cost \$12,000; Pringle & Smith, Archts., Norris Bldg. 11-10

Ga., Griffin—Lewis Thomas erect \$18,000 residence; brick veneer, 2 stories and basement, composition or slate roof; Burge & Stevens, Archts., 101 Marietta Bldg., Atlanta; Wheaton & Sons, Contrs., Griffin.

Ga., Rome—Dr. Geo. B. Smith let contract to Barge-Thomson Co., Ellis St., Atlanta, for \$42,000 residence; common and face brick, Indiana limestone trim, 2 stories and basement, 89x52 ft., Buckingham slate roof, cement, tile, slate and Armstrong linoleum floors, Warren Webster system of heat; Pringle & Smith, Archts., Norris Bldg., Atlanta. 10-27

La., New Orleans—Mrs. Emerson A. Dunbar, 710 Poydras St., erect \$18,000 building, State and Freret Sts.; Edwin L. Markel, Contr., 3838 Louisiana Ave. Pkwy.

Md., Baltimore—Ten Hills Corp., Chapel Gate Lane and Edmondson Ave., erect \$10,000 dwelling and garage, 529 St. George Rd.; 2 stories, 35x27 ft. and 20x20 ft., slate roofs, hot water heat; Fredk. Thomas, Archt., 726 E. 33rd St.; Caughy & Co., Contrs., 220 E. Lexington St.

Md., Baltimore—Geo. W. Schoenhals, Munsey Bldg., erect 15 brick dwellings, 600 blocks Craycombe Ave. and W. 38th St.; 2 stories, 15x48 ft. and 15x42 ft., slag roofs, hot water heat; total cost \$35,000; M. A. Taylor, Archt.; owner builds.

Md., Baltimore—Raymond Turner erect \$15,000 residence, 3702 St. Paul St.; brick, 2½ stories, 46x36 ft., slate roof, hot water heat; Fiske Kimball, Archt.; H. A. Knott & Co., Contrs., 2107 N. Charles St.

Md., Baltimore—J. S. Downing, 2009 Greenmount Ave., erect stone dwelling, St. Albans Way near St. Dunstons Rd., Homeland; Palmer, Willis & Lambdin, Archts., 513 N. Charles St.

Md., Baltimore—R. B. Construction Co., 2712 Reisterstown Rd., erect 23 brick dwellings, 4100 block Rollins Ave. and 3800 block Granada Ave.; 2 stories, 14x45 ft., slag roofs; total cost \$60,000; Geo. Wessel, Archt., 601 W. 40th St.; owner builds. 11-10

Miss., Clarksdale—Mrs. N. L. Mooney let contract to F. T. Blackburn for \$12,000 residence and garage; brick veneer, 1 story and basement, 40x64 ft., asphalt roof; Lyman Abbott, Archt.; foundation in. 11-3

Miss., Louisville—D. L. Fair erecting English type residence; brick, stone and Stonekote, 2 baths; Estes W. Mann, Archt., Cotton Exchange Bldg., Memphis, Tenn.

Mo., Kansas City—Edw. F. Reyburn, 6642 Main St., erect \$10,000 residence, 649 W. 69th St.; 2 stories, 30x25 ft., brick; owner builds.

Mo., Kansas City—D. W. Evans, 1224 W. 61st St., erect 3 frame dwellings, 5001-05-07 Indiana St.; 1 story, 22x34 ft.; total cost about \$10,000; B. F. Dorman, Contr., 3528 Virginia St.

Mo., Kansas City—R. L. Falkenberg & Co., 6247 Brookside Blvd., erect \$16,000 frame residence, 1045 W. 62nd St.; 2 stories, 64x30 ft.; owner builds.

Mo., Kansas City—T. F. Willis, 300 W. Armour St., erect \$10,000 residence, 803 W. 62nd St.; 2 stories, 25x48 ft., brick; W. S. Rawlings, Contr., Balcony Bldg.

Mo., St. Louis—Wm. Glicker, 728 Yale Ave., erect \$15,000 residence, 7015 Maryland Ave.; oak floors, tile or slate roof, tile bath, vapor heat; Edw. B. Kelley, Archt., 6804 Delmar Blvd.; owner builds.

Mo., St. Louis—Wm. Green & Son, 3131 S. Broadway, erect \$10,000 residence, 3651 Kingshighway Park; brick, 1 story and basement, 31x35 ft., oak floors, tile bath, rubber-oid shingle roof; day labor.

Mo., St. Louis—Mr. King, care Adolph F. Stauder, Archt., 6032 S. Kingshighway Blvd., erect \$20,000 residence, Parkdale and Glenn Aves.; brick, 2 stories and basement, 32x50 ft.; F. J. Gaedig, Archt., R. No. 7, Afton.

Mo., St. Louis—E. Contarini, 762 Walton St., erect 5 brick dwellings, 3618-22-26-30-34 Childress St.; 2 stories, 26x44 ft., composition roofs, hot air heat; total cost \$17,500; plans and construction by owner.

Mo., St. Louis—C. E. Klemp erect 5 brick dwellings, 2611-15-19-23-27 Pennsylvania St.; 1 story, 25x34 ft., slate roofs, hot air heat; total cost \$20,000; G. C. Karr, Archt.-Contr., both 214 Calumet Bldg.

Mo., St. Louis—A. G. Pasquier plans number dwellings, Ridgeway, S. side Clayton Rd. near McKnight Rd.; red matt brick, slate roof, 2 stories, 3 baths; 1 under construction.

Mo., University City, St. Louis—R. P. Page, 1344 Waldron St., erect \$15,000 brick residence, 7260 Princeton Ave.; 2 stories and basement, 42x30 ft., tile roof and baths, oak floors; John J. Schmid, Archt., 4053 Giles St.; owner builds.

N. C., High Point—J. Elwood Cox, Pres., Commercial Natl. Bank, let contract at \$70,000 to R. K. Stewart & Son, 154 S. Main St., for brick, hollow tile and limestone residence; 2 stories, and basement, concrete foundation, Vermont slate roof; Northup & O'Brien, Archts., Starbuck Bldg., Winston-Salem. See Want Section—Building Material and Equipment. 11-10

Okla., Tulsa—Geo. S. Bole, Exchange Natl. Bank Bldg., let contract to G. D. Morrow & Son, Kennedy Bldg., for brick residence, S. of 41st St. near Lewis Ave.; work started; brick and stone, terra cotta trim, green shingle roof, 2 stories and basement, 41x110 ft.; Holt, Price & Barnes, Archts., 800 Davidson Bldg., Kansas City, Mo.

S. C., Gaffney—Virgil L. Smith, care Smith Hardware Co., erecting residence.

Tex., Brownsville—Jos. K. Wells erect 6 frame dwellings; 5 rooms; Proctor & Dudley, Contr.

Tex., Dallas—J. W. Bartholow, 1221 S. Lamar St., erecting modified English type residence, 3806 Potomac Ave., Highland Park; brick, stone, stucco and half timber, slate roof, 2 baths, slate and other floors; Bryan & Sharp, Archts., Constr. Industries Bldg.; C. A. Fuess Co., Contr., 1900 N. St. Paul St.

Tex., Eagle Lake—E. L. Beckman erect brick veneer residence; 1 story; Wm. Ward Watkins, Archt., Houston, completed plans.

Tex., Electra—W. T. Waggoner, Jr., let contract for \$55,000 residence to A. C. King, Fillemore St., Wichita Falls, at \$26,000; brick

and stucco, 2 stories, 70x55 ft., oak and tile floors, concrete foundation, clay tile roof; furnishings, equipment, etc., \$15,000; Voelcker & Dixon, Archts., 207 P. S. Bldg., Wichita Falls. 11-10

Tex., Houston—Jas. B. Anderson erecting 2 frame duplexes, 2400 block Hazard St.; 2 stories, 12 rooms, cost \$9000 each; W. R. Fulton, Contr.

Tex., Houston—W. R. Fulton erecting 2 duplexes, 2400 block Hazard St.; 2 stories, 12 rooms, frame; cost \$9000 each; Jas. B. Anderson, Contr.

Tex., Houston—C. A. Dupree, 830 Arthur St., erect \$10,000 residence, 4533 Noble St.; brick veneer, 7 rooms; C. C. Rouse, Contr., Bankers Mortgage Bldg.

Tex., Houston—Frank F. Meyer, 802-12 Franklin St., let contract to Northern Construction Co. for \$45,000 residence, Bellaire Blvd.; brick veneer, 2 stories; A. C. Flinn, Archt., Bankers Mortgage Bldg. 10-20

Tex., Houston—Harry W. Freeman, Bankers Mortgage Bldg., erect \$15,000 residence, 2216 Rosedale Ave., Riverside Terrace; 2 stories, brick veneer, 11 rooms; L. Gabert, Archt., Binz Bldg.; J. A. Roberts, Contr., 603 Highland St.

Tex., Houston—P. S. Pearson erect \$12,000 residence, 2814 Rosedale St., Riverside Terrace; brick veneer, 10 rooms; C. F. Kelly, Contr.; work started.

Tex., Houston—Chas. Bauer, P. O. Box 4089, about one-fourth completed 2 duplexes and garages, 1754-56 Bernard St., Lancaster Place Extension No. 3; 2 stories, 37x49 ft., oak floors, asbestos roofs, concrete foundations, cost \$12,000; gas-steam heat, A. Abbe; electrical work, Electric Maintenance Co., 1404 Elysian St.; plans and construction by owner, whose plans call for total of 12 duplexes.

Tex., Houston—J. B. Hines, Second Natl. Bank Bldg., erect Colonial residence, River Oaks; 10 rooms, 2 stories; Jos. W. Northrop, Jr., Archt., West Bldg.; Henry H. Yates, Contr., Humble Bldg.

Tex., Mercedes—Mrs. Loraine W. Allen, 5061 Lindell Blvd., St. Louis, let contract at \$16,750 to Walter F. Chambers, San Benito, Tex., for hollow tile and stucco residence; 2 stories; R. Newell Waters, Archt., Weslaco, Tex.; electrical work, Mercedes Electric Co.; plumbing, Mercedes Plumbing Co., both Mercedes. 11-10

Tex., Mission—Harry Stewart remodel residence; Campbell & Congdon, Contr.

Tex., San Antonio—A. B. Walton has contract for 3 dwellings; plans and construction by Contr.

Tex., San Antonio—B. G. Barnes, 146 Carey Ave., let contract to Mitchell Construction Co., Builders Exchange Bldg., at \$27,811, for semi-fireproof residence, Alamo Heights; 1 and 2 stories and basement, 75x52 ft., hardwood and tile floors, rein. concrete foundation, tar and gravel and clay tile roof; Mervin Eickenrodt and Bartlett Cooke, Archts., 801 Maverick Bldg.; W. E. Simpson & Co., Engrs., Natl. Bank of Commerce Bldg.; vapor heating and plumbing, Kirkwood & Wharton, 456 Main Ave.; electrical work, Martin Wright Electric Co., 308 E. Houston St. 10-27

Tex., San Antonio—J. DeWinne, 739 Viendo St., erect \$10,000 residence, 339 Club Drive; 6 rooms, brick veneer; owner builds.

Tex., Sherman—T. A. Dickson rebuild burned residence, Club Lake, near Sherman.

Tex., Sherman—Sherman Sash & Door Co., Sherman, has millwork contract for \$40,000 residence for Joe F. Etter; Thomson & Swaine, Archts., Construction Industries Bldg.; Walter Whitley, Contr., both Dallas.

Tex., Uvalde—Lee Schwartz erect frame residence; 2 stories, 8 rooms; Will N. Noonan Co., Archt., Bldrs. Exchange, San Antonio; contract let.

Tex., Wichita Falls—N. H. Martin, Perkins-Snyder Bldg., erecting brick veneer residence, Country Club Estates; 1½ stories; Sorey & Vahlberg, Archts., Braniff Bldg., Oklahoma City, Okla.; Jas. Harrison, Contr.

Va., Richmond—City Building Corp., H. T. Eubank, Pres., Builders Exchange Bldg., has contract for 4 dwellings, Westover Hills section, and for 10 in Ginter Park section.

Government and State

D. C., Washington—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., let contract at \$14,250 to Warren F. Brenizer Co., 101 New York Ave. N. E., to excavate for \$17,000,000 Department of Commerce Building; and at \$10,400 to same firm to excavate for \$10,000,000 Department of Internal Revenue Building; York & Sawyer, 100 E. 42d St., New York, archts. for former; Edw. H. Bennett, 80 E. Jackson Blvd., Chicago, Ill., consulting archt. for both structures. 11-10

Hospitals, Sanitariums, Etc.

S. C., Greenville—City let contract at \$24,000 to Charley Kloeckler, 215 Walker Bldg., for nurses' home, City Hospital; 2 stories, 36.6x102.2 ft., oak floors, Flintkote Giant shingle roof; Wm. R. Ward, Archt., Walker Bldg.; heating, L. L. Barr Plumbing and Heating Co., 19 W. North St.; electrical work, Huntington & Guerry, Inc., River St.; plumbing, F. W. Smith Plumbing Co., 113 W. Coffee St. 11-10

Hotels and Apartments

Ala., Mobile—Capt. E. Roy Albright and I. V. Wood, of Albright & Wood, 278 Dauphin St., chain drug stores, and H. M. McPhillips will erect \$100,000, 3-story, 21-apartment building at Government and Carlin Sts.; J. Platt Roberts, Archt., First Natl. Bank Bldg.; B. E. Buffalo & Co., Contrs., 658 East St., Memphis, Tenn., and Peoples Bank Bldg., Mobile.

Ark., Fayetteville—Fulbright Estate, care Mrs. Jay Fulbright, let contract to E. V. Bird Construction Co., Box 264, for improving and enlarging Washington Hotel; \$10,000; remodel old bank building into lobby and coffee shop; John Warren Teasdale, Archt., 1005 Times Bldg., St. Louis, Mo. See Want Section—Building Materials and Equipment. 11-10

Fla., Jacksonville—Guy Marvin, 1858 Mallory St., let contract to O. P. Woodcock, 302 Lutz Bldg., for \$15,500, 2-story, brick veneer flats on Willow St.

Fla., Jacksonville—Fred Thellman, 401 Barnett Bldg., erect \$15,000, 2-story hollow tile apartment; owner builds.

Ga., Waycross—W. H. Moore, Jr., Mgr. of Phoenix Hotel, remodeling and redecorating.

Ky., Lexington—H. G. Barnes, Mentelle Park, will sub-let all work on \$25,000, 3-story and basement, 39.6x72 ft., brick veneer, 4-apartment building in Ashland Park; rubble foundation complete, oak and tile floors, tile and composition roof, hot-water heating; Churchill & Gillig, Archts., Fayette Bank Bldg. See Want Section—Building Materials and Equipment. 11-3

La., New Orleans—Truscon Steel Co. Cana-Bank Bldg., awarded contract for reinforcing steel and metal windows and Lukens Steel Co., Poland and Rochelave Sts., structural steel for 18-story addition to Jung Hotel for which O. M. Gwin Construction Co., Union Indemnity Bldg., has general contract at \$749,937; Weiss, Dreyfous & Seiferth, Archts., Maison Blanche Bldg. 11-10

Mo., Cape Girardeau—Gerhardt & Son, 633 Broadway, Contrs., at \$143,000 for Hotel Marquette to be erected for the Cape Girardeau Hotel Co., let following sub-contracts: Heating, Eichler Heating Co., Railway Exchange Bldg., St. Louis; plumbing, Polack Bros., Broadway; elevator, Otis Elevator Co., 260 11th Ave., 2 passenger elevators; plans by Manske & Bartling, 410 N. Euclid St., St. Louis, include 6 stories, 83x126 ft., reinforced concrete, brick, stone and terra cotta, concrete and terrazzo floors, concrete foundation; R. K. Knox, Supervising Archt. 10-20

Mo., Powersite—Ozark Beach Resort Co., M. T. Crist, Pres., completed excavation for \$40,000 resort hotel at Ozark Beach; 3 stories, 40 rooms, concrete walls, stone trim; 9-hole golf course.

Mo., St. Louis—Herbert M. Edmunds, 114 N. Seventh St., plans to erect \$1,250,000, 16-story apartment building on site of Lazarus residence at 4481 W. Pine Blvd.; 150 units of 1 to 5 rooms, and 1 and 2 baths; fireproof, brick and stone, baths have both tub and shower, electric dumb waiters, elevators, mail chutes, incinerators, laundry tubs, 100-car garage; plans and construction by Herbert M. Edmunds Building Co., 114 N. Seventh St.

Mo., St. Louis—H. Specter, Arcade Bldg., let contract to J. Rubin, 904 Chestnut St., for \$50,000, 3-story, 64x85 ft., brick tenement, 6152 Waterman St.; also for \$65,000, 3-story, 163x85 ft., brick tenement, 6158-70 Waterman St.; composition roofs, steam heat; O. J. Popp, Archt., Arcade Bldg.

Mo., St. Louis—J. P. Gurschler, 4963 Tyrolean St., let contract to L. Kreienheder, 6608 Elmer St., for \$14,000, 2-story, 48x46 ft., brick tenement, 4600-2 Quincy St.; gravel, pitch and tar roofing, hot air heat.

Mo., St. Louis—Gravois R. & D. Co., 6117 Gravois St., let contract to A. Lautz, 5409 Hamilton St., for two 2-story, 24x48 ft., brick tenements, 5804-68 Goener St., cost \$12,000, asphalt shingle roofs, hot air heat; A. Stauder, Archt., 6100 S. Kingshighway.

Mo., St. Louis—E. E. Hartman, 2545 Sample St., erect \$10,000, 2-story, brick, 32x49 ft. tenement, 1015 Art Hill Pl.; asphalt shingle

roof, hot air heat; General Construction Co., Archts.-Builders, 437 N. Kingshighway.

Mo., St. Louis—A. R. Huskey, 4526 Kennerly St., has plans by and let contract to General Bldg. Corp., 451 N. Kingshighway, for \$12,000, 2-story, 55x33 ft. tenement, 4958 Parker St., asphalt shingle roof, hot air heat.

Mo., St. Louis—C. Kelly, 4504 Lexington St., let contract to H. J. Kelly, same, for two 2-story, brick, 19x43-ft. tenements, 4411-15 Richard Pl.; composition roofs, hot air heat, \$10,000; J. Bock, Archt., 5017 Lotus St.

Mo., St. Louis—F. Siteman, 5832-A Terry St., erect four 2-story, brick, 34x43-ft. tenements, 5815-20 Roosevelt Pl.; composition gravel roofs, hot air heat, \$36,000; P. Siteman, Archt.-Builder, 5530 Ashland St.

Mo., St. Louis—C. H. Weber, 3739 Schreve St., erect \$10,000, 2-story, 37x48-ft., brick tenement, 4680-2 Kossuth St.; composition roof, hot air heat; also \$700 garage; owner builds.

N. C., Charlotte—Van Ness, Brenizer & Van Ness, E. Third St., started work on two 2-story, brick veneer apartment houses, E. Fifth St. and Clement Ave., and Park Dr. and Clement Ave.; cost \$20,000 and \$14,000, 32 and 16 rooms, 36x78 ft. and 26x59 ft.; oak and tile floors, brick foundations, slate roofing; steam heating to A. Z. Price, 219 Latta Arcade; plumbing, J. V. Andrews, 207 N. College St.; electric work, Woodside Electric Co., 37 E. Fourth St.; roofing, Shuman Roofing Co., N. Boulevard; M. R. Marsh, Archt., Builders Bldg.; Southeastern Construction Co., Contrs., 210 W. Second St.

N. C., Charlotte—James H. Bost, 926 E. Fourth St., let contract to Graham Bros., East Ave., for \$36,000, 2-story, 45x87-ft. brick veneer apartment building, 6 Travis Ave.; wood floors, brick foundation, composition roof; foundation in materials purchased; J. V. Andrews, 207 N. College St., steam heat.

Okla., Tulsa—George C. Burgin, Archt.-Contr., drew plans for \$70,000 apartment building.

S. C., Dillon—C. L. Wheeler, owner of Hotel Wheeler, leased and managed by Capt. I. M. Gregorie, let contract to John E. Deibler for remodeling.

Tex., Beaumont—H. Globber, 1404 Grand St., let contract to Burwick Contracting Co. for 20-room, brick apartment building, 1400 block Magnolia Ave.; also 3 small residences in rear, total cost \$12,000.

Tex., Corpus Christi—American and Venetian Marble Co. has contract for terrazzo work on \$250,000 Princess Louise Hotel, for which James T. Taylor, First Natl. Bldg., Fort Worth, has Gen. Contract.

Tex., Dallas—J. F. Giles, 1621 S. St. Paul St., let contract to Cowdin Brothers, for 2-story, brick apartment building on Hawthorne St.; each apartment contain 7 rooms with tiled baths, built-in features, hardwood floors; F. J. Woerner & Co., Archts., Central Bank Bldg.

Tex., Houston—Sligar & Allison erecting \$16,500, 2-story, brick veneer apartment building at 602 Portland St.

Tex., Houston—A. E. Olson & Bros., Builders, 1517 Milam St., erecting \$12,500, 2-story, brick veneer apartment building at 614 W. Gray St.

Tex., San Antonio—Rogers Shelton, City Natl. Bank Bldg., let contract to Ezzell & Jones, Standard Trust Bldg., for \$15,000, 2-story, frame and stucco apartment building, 115 Blanco Road.

Miscellaneous

Ark., Malvern—Women's Club of Malvern started work on library building.

Fla., Tampa—G. A. Miller, Inc., Contr., 312½ Twigg St., awarded following subcontracts for \$650,000 convent for Sisters of Holy of Jesus and Mary: Plumbing and heating, W. E. McAndrew, 302 Tampa St.; electrical work, Brown Electric Co., 1205 Franklin St.; cast stone, Burton Cast Stone Co., 1717 Arch St.; all Tampa; metal doors and windows, American Sheet Metal Works, 3323 Gravier St., New Orleans, La.; Ditmars & Reilly, Archts., 111 Fifth Ave., New York.

Md., Baltimore—Maryland Improvement Corp., Lee E. Hartman, Pres., 26 Light St., let contract to Consolidated Engineering Co., 20 E. Franklin St., for market and arcade building, North and Maryland Aves., to be known as North Avenue Market; cost \$1,500,000, including site, building and equipment; plans by Smith & May, Calvert Bldg., include structure 245x303 and 230 ft., fireproof, brick, steel and concrete, contain 24 stores, 240 market stands built of white enamel brick with marble tops and glass

counter protection, 120 of which will be equipped with refrigeration, sanitary sea food department; floor drains to be installed; restaurant and cooler lockers in basement; Market Const. Service Co., Charles D. Kamp, Pres., Cleveland, O., local offices at 327 N. Eutaw St., has been engaged as operating company.

Miss., Gulfport—Gulfport Hotel Corp., L. A. Reinert, Mgr. Dir., started work on foundations for Spanish type recreational buildings on grounds adjoining Hotel Markham under direction of A. J. Negretto, Ch. Asst. Engr., for James W. Billingsley, Interstate Bldg., New Orleans, Const. Engr. and Contr. for company; cost \$27,500.

N. C., Glenwood—Methodist Orphanage, Rev. A. S. Barnes, Supt., erecting babies' cottage and superintendent's home; br.ck. cost \$15,000; also convert present home of superintendent into dormitory.

Schools

Ga., Atlanta—Board of Education let contract at \$479,500 to Palmer-Spivey Constr. Co., 124 8th St., Augusta, for Stanton, Davis Street, Ormewood and Capitol View schools and addition to Hoke Smith Junior High School; G. Lloyd Preacher & Co., Inc., Archts., Wynne-Claughton Bldg.

Ga., Atlanta—Board of Education, R. R. Ritchie, Asst. Supt., 41 Walker St., recd. low bid from Converse-Myers Co., 509 Bona Allen Bldg., at \$36,628, for 2-story and basement, 124x67 ft. Ashby Street School, Ashby and Lena Sts.; brick walls, concrete footings, built-up roof; plumbing to Stevenson Plumbing Co., at \$5300; electric work, Howard P. Foley Co., Inc., Exchange Bldg., Miami, Fla., at \$3510; Clare Co. low on heating, but award deferred; G. Lloyd Preacher & Co., Archts., Wynne-Claughton Bldg.

Mo., St. Louis—E. L. Musick, 2314 Randolph St., let contract to T. I. Manahan, 4127 Gratiot St., for \$10,000, one-story, 98x40 ft., brick school, 5218 Berthold St.; composition roof, steam heat.

Okla., Bartlesville—Universal Construction Co., Coffeyville, Kan., has contract at \$29,800 for addition to Douglas School; Arthur Gorman, Archt.

Okla., Langston—State Board of Affairs, G. C. Woolard, Chmn., State Capitol, Oklahoma City, let contract to Harmon & Mattison Construction Co., 905 Herskowitz Bldg., Oklahoma City, at \$78,000, for Men's Dormitory and Women's Dormitory at Colored Agricultural and Mechanical College; steam heating and plumbing, Kinsey-Swaford Co.; Guy C. Reid, Archt., 421 W. 23rd St., both Oklahoma City.

Okla., Stillwater—State Board of Agriculture, Oklahoma City, let contract to Bailey-Burns Construction Co., Norman, at \$91,300 for new dairy building and to Tankersley Construction Co., Sapula, at \$96,800 for industrial building at Oklahoma Agricultural and Mechanical College.

Tex., Brownsville—Valley Masonry Co., Edinburg, has contract for masonry work, and Bedford-Carhage Stone Corp., Houston, for stone work, on \$220,300 High School, for which Walsh & Burney, 928 N. Flores St., San Antonio, have Gen. Contract.

Tex., El Paso—George Beaudette, Contr., 605 Chicago St., let following sub-contracts on laboratory building at University of Texas School of Mines and Metallurgy, for which he has contract at \$16,680, excavation completed: Heating and plumbing, Elliott Engr. Co.; electric work, Gem Electric Co.; steel and iron, Darbyshire Harvie & Iron Machine Co., 701 S. Florence St.; steel sash, Fenestra Steel Window Co., 1615 Bassett Ave.; plans by R. L. White, University of Texas, Austin, include 2 stories, 34x58 ft., stone, brick and concrete, fireproof, concrete floors, stone foundation. See Want Section—Building Material and Equipment.

W. Va., Clarksburg—Board of Education of Sardis District, A. E. Davison, Sec., let contract to A. L. Shrum Co., at \$27,307, for addition to High School at Wallace and new building at Sardis; brick and tile; Edw. J. Wood & Son, Archts., Lowndes Bldg.

Stores

D. C., Washington—Cafritz Construction Co. has permit for three 2-story, brick stores and dwellings, 5301-5 Georgia Ave. N. W.; \$24,000.

Fla., Miami—M. O. Fullam leased Golf Park Bldg., 219-23 E. Flagler St., started remodeling for department store.

Fla., West Palm Beach—George Frye let contract to Don Hillyer for Spanish type stucco store building, 216 Emernia St.; 18x50 ft., cast stone trim, tile panels.

Fla., Winter Haven—Central Florida Gas Corp., Ralph B. Wagner, Pres., erecting 2-

story office building and sales room, N. Third St.

La., Bastrop—L. E. Calhoun supervising construction of 2 store buildings on Franklin St.

Md., Baltimore—Consolidated Engineering Co., Inc., St. Paul and Franklin Sts., let following sub-contracts on \$750,000, 6-story and basement store and warehouse addition to Hecht Brothers, Baltimore and Pine Sts.: Reinforcing steel, Kalman Steel Co.; millwork, Otto Duker & Co.; painting, J. G. Valliant Co., 224 N. Charles St.; cut stone, James O'Meara, Frisby & Belt R. R.; marble, tile and terrazzo, J. B. Dunn & Sons, 853 N. Howard St.; glass, Pittsburgh Plate Glass Co., 8 S. Paca St.; metal frames and sash, Campbell Metal Window Corp., Bush and Hamburg St.; kalamein work, William F. Zeller Co., 613 W. Cross St.; roofing and sheet metal work, W. A. Fingles, Inc., 29 S. Howard St.; structural steel and miscellaneous iron, Dietrich Brothers, 220 Pleasant St.; electric wiring, Blumenthal-Kahn Electric Co., 518 N. Charles St.; sprinkler system, Grinnell Co., Inc., American Bldg.; plumbing, H. E. Crook Co., Inc., 28 Light St.; heating and ventilating, Riggs, Distler Co., Inc., 216 N. Calvert St.; hardware, Hubbard & Engleston, 120 W. Baltimore St.; lumber, James Lumber Co., 921 Aliceanna St.; passenger elevators, Atlantic Elevator Co., Inc., Munsey Bldg.; all Baltimore; plastering, Kraft-Murphy Co., 2525 Pennsylvania Ave. N. W., Washington, D. C.; waterproofing, Western Water Proofing Co., Syndicate Trust Bldg., St. Louis, Mo.; rolling steel doors, J. G. Wilson Corp., 1600 Walnut St., Philadelphia, Pa.; fire doors, Richmond Fireproof Door Co., Richmond, Va.; metal forms, Deslauriers Column Mould Co., 233 Broadway; freight elevator doors, The Peelle Co., Brooklyn, Stewart Ave., both New York; Abbott-Merk & Co., Archts.-Engrs., 175 Fifth Ave., New York; Smith & May, Const. Archts., Calvert Bldg.

Miss., Tupelo—H. C. McNutt let following sub-contracts for 3-story building, W. Troy St., on which work has been started: Heating, E. A. Steed; electric work, Wooley Electric Co.; plumbing, Sanitary Plumbing and Heating Co. See Want Section—Building Material and Equipment.

Mo., Catron—G. W. Ford, Lilbourn, owner of Catron Store Co., let contract to Walker & Cravens, Piggott, Ark., for 36x70 ft., hollow tile store; concrete foundation.

Mo., Kansas City—Thomas O. Bright, 31st and Prospect Sts., let contract to J. W. Thompson Construction Co., Huntzinger Bldg., for \$80,000, 2-story, brick and concrete, 107x150-ft. business and ballroom building at 3101-7 Gillham Road.

Okla., Oklahoma City—Standard Office Supply Co., Frank M. Hughes, Pres., 110 W. Grand Ave., taking over additional space, remodeling.

Tex., Austin—Walter Tips Co. let contract to C. W. Moore, 609 W. 16th St., for remodeling 3-story building on Congress Ave.; \$25,000; C. L. McClellan, Inc., lessee.

Tex., Baytown—J. L. Sullivan let contract to H. A. Owens, for \$25,000, 2-story, brick veneer building on Main St.; 3-store rooms on lower floor, 28 hotel rooms above; work started.

Tex., Corpus Christi—O. B. Carver, City Natl. Bank Bldg., started work on concrete foundation for \$10,000, brick and hollow tile, 62x75 ft., one-story building on Staples St.; cement floors, Johns Manville roof; E. B. Jackson Constr. Co., Contr., 602 Nixon Bldg.; Smith Electric Co., 619 Mesquite St., electric work; Corpus Christi Plumbing Co., 1023 Laredo St., plumbing; Hamon & Co., Archts., McDonald Bldg. See Want Section—Building Material and Equipment.

Tex., Edcouch—L. S. Shore, Elk City, Okla., erecting \$15,000 store and \$8000 service station and garage.

Tex., Edinburg—R. W. Briggs & Co., Pharr, have contract for 2-story, hollow tile and brick, 50x104 ft. store and office building, for Henry Klossner.

Tex., Houston—Southwestern Construction Co., West Bldg., has contract for remodeling building at S. W. corner Main and Capitol Sts., for J. J. Sweeney Jewelry Co.; James Ruskin Bailey, Archt., 1906 Main St.

Tex., Houston—A. Bucsanyi, Meadows and Cline Sts., erecting \$19,534, 1-story, 100x100-ft., reinforced concrete, brick, concrete and stone store building, Franklin and Austin Sts.; concrete floors and foundation; electric work to Jacobs Bros. Electric Co., 1014 Prairie Ave.; plumbing, L. Lennie, 234 Sampson St.; concrete trim stone, Pyramid Stone Co., National and Center Sts.; concrete floors, W. L. Robertson, 908 Patterson St.; roof,

Austin Bros. Roofing Co., Union Natl. Bank Bldg.; L. L. Reber, Contr., 5005 Blossom St. Tex., Midland—Frank Orson let contract to A. H. Robson for 2-story store and apartment building.

Tex., San Antonio—H. Lee Ransom, 127 Oakland St., H. H. Levy and W. M. Longini erecting \$20,000, 1-story, concrete, stone-tile, 5-store building at Broadway and Elizabeth Road, Alamo Heights; Robert B. Kelly, Archt., Travis Bldg.; Moeller & Weilbacher, Contrs. 11-10

Tex., San Antonio—Mrs. W. H. Harrigan, care J. Clyde & Percy Williams, Archts., Moore Bldg., let contract at \$10,110 to Mitchell Construction Co., Builders Exchange Bldg., for 1-story, reinforced concrete, brick, cast stone trim store building, Houston and Pecos Sts.; plumbing, A. H. Shafer, 418 St. Mary's St.; wiring, Graham & Collins, 306 W. Commerce St.

Tex., Turkey—H. Gilmore erecting 25x100 ft., brick mercantile building.

Tex., Turkey—R. F. Meacham erecting 25x100 ft., fireproof, brick mercantile building.

W. Va., Clarksburg—Louis Ollker, Enraw Apartments, remodeling Nusbaum Building on Third St., to be occupied by People's Furniture Store, Timberlake Bldg.

Theaters

Miss., Meridian—Hamasa Temple of Mystic Shrine let contract to McArthur & McLemore, M.-W. Bldg., for remodeling present auditorium into 1-story and balcony theater building, for Saenger Amusement Co., 1401 Tulane St., New Orleans, La.; Emile Weil, Inc., Archts., Whitney Central Bank Bldg., New Orleans. 10-20

Mo., St. Louis—Charwood Realty Co. let contract to Lehr Construction Co. for \$30,000 negro motion picture theater, S. W. cor.

Third and Francis Sts.; Webb Siemens, Archt., Bartlett Bldg. 11-10

Tex., Turkey—T. L. Colvin erecting 30x100 ft., brick, fireproof theater building.

Warehouses

Tex., Amarillo—City let contract to Clem Anderson, 1008 W. Sixth St., for warehouse for downtown station of water system.

Tex., Houston—W. L. Goyen, Post-Dispatch Bldg., has contract for alterations to Universal Terminal Warehouse Co. building at 1006 Washington Ave. at Elder; R. D. Steele, Archt., First Natl. Bank Bldg. See Warehouses—Buildings Proposed.

Tex., Houston—Texas Steel Building Co. has been awarded contract and is preparing plans for \$36,000, 1-story, steel warehouse at Summers and Winter Sts., for E. L. Alexander, West Bldg., and J. Frank Boyer, 4204 Walker St.

THE CLASSIFICATIONS IN THIS SECTION ARE:

WANT SECTION

Machinery and Supplies

Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.

Building Materials and Equipment

This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.

Bids Asked

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.

Machinery and Supplies

Air Compressor.—St. Lucie Motors, Inc., Stuart, Fla.—Wants prices on air compressor.

Barrel Making Machinery.—Stafford Brothers, South Mills, N. C.—Wants to purchase improved barrel making machinery.

Blue Print Machine, etc.—Charles Couthwell Co., 407 Navarro St., San Antonio, Tex.—Wants 42-in. Pease blue print machine with washer and dryer and one 54-in. Paragon washer and dryer.

Boilers, etc.—C. D. Mills & Co., 1906½ Main St., Columbia, S. C.—Wants data on boilers, pipe and fittings.

Boiler.—R. P. Johnson (Mch. Dealer), Wytheville, Va.—Wants 50 h.p., high pressure locomotive boiler, on wheels or on skids, with full equipment, state price, etc., second-hand equipment.

Boiler (Oil Burning).—Fayetteville Ice & Manufacturing Co., Fayetteville, N. C.—Wants small, economical oil burning boiler, used to supply steam for ice cream department in washing cans, heating, etc.

Bottling Machine.—Nehi Company of Owensboro, Ky., Owensboro, Ky.—Wants prices on Dixie bottler.

Brick Making Machinery.—W. B. Hinkley, San Benito, Tex.—Wants prices on brick making machinery.

Concrete Mixer.—Earnest Bros., Richmond, Va.—Wants to purchase 1-yd. concrete building mixer with charging skip and water tank.

Cotton Gins.—C. W. Howth, Perlstein Bldg., Beaumont, Tex.—Wants data on cotton gins specially designed for ginning sea island cotton, which is long staple cotton raised off coast of South Carolina; correspond with manufacturers.

Die.—See Stamping Machine, etc.

Engine.—Drawer 200, Summerville, S. C.—Wants 18 to 22-in. cylinder Corliss or Uniflow engine, modern type, first-class operating condition; state price, specifications, shop number, location, etc., with photograph or blue print.

Feed Water Heater.—Collins Granite Co. Inc., Danville, Va.—Wants feed water heater with sufficient capacity for 350 to 400 h.p. boilers, desire closed type, good condition.

Generator Set.—Hackley Morrison Co., Inc. (Mch. Dealers), 204 N. Jefferson St., Richmond, Va.—Wants 15 kw., D. C., 125 volt, 900 r.p.m. compound wound generator, prefer with pole, rheostat, base and pulley.

Gravel Pit Machinery.—Stokes & Shields, P. O. Box 29, Lockney, Tex.—Wants specifications and prices on gravel pit machinery for loading trucks and R. R. cars.

Grinding Machinery (Oyster Shell).—The Port Royal Shellfish Co., Orangedale, C. B. Canada—Wants data and prices on suitable

machinery for grinding oyster shells for chicken grit.

Knife Grinder.—Pennwaller Lumber Co., W. Gwinnett St., Savannah, Ga.—Wants second-hand automatic knife grinder, 24-in. carriage; state condition.

Marl Drying and Crushing Equipment.—E. McN. Carr, Civil Engr., Rose Hill, N. C.—Wants to correspond with contractor owning drying and crushing equipment, for development of approximately 200,000 tons of limerock or very high grade marl.

Motors.—Carolina Electrical Equipment Co., Raleigh, N. C.—Wants two 40 h.p., two 50 h.p., two 60 h.p. and three 75 h.p. slip ring motors, 3 phase, 60 cycle, 220-550-2200 volt; we buy burned out and defective motors.

Pulleys (Pressed Steel Split).—V. L. Nicholson Co., 102 W. Clinch St., Knoxville, Tenn.—Wants to purchase number of pressed steel split pulleys; correspond with manufacturers.

Rip-saw.—Florida Orangewood Products, Inc., N. Fremont and Pine St., Tampa, Fla.—Wants prices on rip-saw with carriage sometimes termed bolting machine, for sawing small logs from 1-in. to 4-in. length and from 44 to 4-in. diam. to any desired thickness.

Spring Coiling Machine.—H. M. Pratt, 964 St. Charles Ave. N. E., Atlanta, Ga.—Wants one used spring coiling machine to manufacture coil springs, capacity up to 1 5/8-in. diam. spring steel and 24-in. length of coils, arranged with motor drive but without motor.

Stamping Machine, etc.—Florida Orangewood Products, Inc., N. Fremont and Pine St., Tampa, Fla.—Wants prices on machine for stamping out pieces of approximately 6x2-in. dimensions from 3/16 orangewood stock, die to cut 10 of such pieces at one operation, bed 4 ft. 6-in. in length by 1-ft. to 2-ft. in width.

Turntable.—Hackley Morrison Co., Inc. (Mch. Dealer), 1708 Lewis St., Richmond, Va.—Wants standard gauge turntable for 10-ft. car.

Vinegar Making Machinery.—E. L. Rosenbaum, 1407 Pine St., New Orleans, La.—Wants data on machinery to manufacture 100 gr. distilled vinegar for commercial use.

(1) **Oil Tank**—1 three compartment lubricating with capacity 5,000 gal. each compartment, with steel structural supports for same.

(2) **Pumps**—2 sets twin rotary capacity gasoline, 100 gal. per minute mounted on base with gasoline engine of 3 h.p. with space permitting fire wall to be built between pumps and engine.

(3) **Oil House**—steel, 16x20 ft. Central Oil Co., Norton, Va., wants the above.

- (1) **Axles**
- (2) **Bearings** (ball and roller)
- (3) **Gaskets**
- (4) **Ring gears and pinions.**

Auto Supply Co., 203 College St., High Point, N. C.—Wants the above supplies.

- (1) **Anvil**—medium size
- (2) **Forge**—small
- (3) **Hydraulic Lift.**

St. Lucie Motors, Inc., Stuart, Fla.—Wants prices on the above equipment.

- (1) **Angles**—up to 8x8x½-in.
- (2) **Elevator**—for automobiles, to be operated by 220 volt

(3) **Gears**—steel or cast iron, cut or cast teeth, 24 to 48-in. diam., also pinions to match

- (4) **I-Beam Hoists**—1 or 2 ton capacity, A. C. or D. C.

(5) **Japanning Oven**—for baking large armatures, natural gas or electric heat, about 6-ft. long, 5-ft. high and 5-ft. wide

- (6) **Lifting Magnet**—for 220 volts, direct current

(7) **Motors**—30 h. p., 3 phase, 60 cycle, 220 volts, 900 r.p.m., AC 220 volts, 3 phase, 60 cycle

- (8) **Steel**—up to 5-in. round .030 to .045 carbon

(9) **Transformers**—5 kv-a, 6600 to 440-220-110-volt and 2200 to 440-220-110-volt

- (10) **Steel Building**—heavily constructed, 1 or 2-story, about 60x140-ft. for garage and shop.

Guyan Machine Shops, B. Shell, Pres., Logan, W. Va., wants above equipment and supplies.

Miscellaneous

Glass Jugs.—Webber D. Mott, Ravenal, S. C.—Wants 5 gal. glass jugs, similar to those used by companies marketing spring water.

Sample Cases.—Elizabeth Evans Eaton, V. Pres., Absopure Products Co., Townley Bldg., Miami, Fla.—Wants to purchase sample cases suitable for toilet preparation canvassers or house-to-house sales people; correspond with manufacturers.

Building Material and Equipment

C. D. Mills & Co., 1906½ Main St., Columbia, S. C., wants prices, complete information and catalogs covering:

- Boilers**
- Heating Plants**—dwellings
- Plumbing Supplies**
- Pipe and Fittings.**

Northrup & O'Brien, Archts., Starbuck Bldg., Winston-Salem, N. C., want prices on following for \$70,000 dwelling, High Point, N. C.:

- Dumb waiters**
- Flooring**—hardwood, tile, rubber
- Limestone**
- Roofing**—slate
- Tile**—hollow.

Lumley & Holland (Plumbing, Heating and Tile Setters), Box 1330, Winston-Salem, N. C.—Wants to purchase:
Tile—floor, roof, and hollow.

Young Men's Christian Assn., Lamont Rowlands, Chmn., Finance Com., Picaune, Miss., wants prices on following for \$40,000 building:
Roofing—built-up.

E. V. Bird Construction Co., Box 264, Fayetteville, Ark., wants prices on following for remodeling Washington Hotel:

Brass Thresholds
Marble Floors and Wainscoting
Iron Railings and Brackets (ornamental)
Ornamental Plaster Corbels
Textone.

Churchill & Gillig, Archts., Fayette Bank Bldg., Lexington, Ky., want prices on following for \$25,000, 4-apartment house:
Flooring—hardwood and tile

Incinerator
Roofing—built-up and tile
Ventilators.

Prof. S. P. Lyle, University of Georgia, Athens, Ga., wants prices on following for \$100,000 dormitory wings, Georgia State College of Agriculture:

Flooring—hardwood (maple) and tile
Roofing—cement tile.

P. O'B. Montgomery, Bldrs.-Engrs., 504-05 Constr. Industries Bldg., Dallas, Tex., wants prices on following for \$300,000 courthouse, San Angelo, Tex.:

Marble
Metal Doors.

E. B. Jackson Constr. Co., 602 Nixon Bldg., Corpus Christi, Tex., wants prices on following for \$10,000 store building for O. B. Carver:

Roofing—built up.
Tile—hollow
Terra Cotta Trim.

W. K. Wharton, Pastor, First Baptist Church, Stephens, Ark., wants prices on following for frame church:

Flooring—hardwood
Incinerator
Roofing—asbestos shingle.

George Beaudett, Contr., 605 Chicago St., El Paso, Tex., wants prices on following for laboratory building at University of Texas School of Mines and Metallurgy:

Electric Refrigerator—good unit that can be installed in small ice boxes under \$75.00 each to replace 50 lbs. ice.

Mrs. G. W. Rose, Fort Stockton, Tex., wants prices on following for frame and stucco residence:

Electric Refrigerators
Flooring—hardwood, linoleum, rubber tile
Gum Interior Trim
Roofing—tile
Sprinklers
Terra Cotta Trim.

Lowndes County Board of Education, Columbus, Miss., wants prices on following for \$19,000 school, Caledonia, Miss.:

Heaters.

Badger & Badger, Box 180, Columbus, Miss., wants prices on following for \$19,000 school, Caledonia, Miss.:

Fire Escape (Chute.)

Campbell-Wheeler Co., Contrs., 407 Barnett Natl. Bank Bldg., Jacksonville, Fla., want prices on following for \$9000 brick veneer dwelling:

Dumb Waiters

Flooring—hardwood

Roofing—asphalt shingle.

Lee Baptist Institute, Pennington Gap, Va., wants prices on following for \$4000 Boys' Dormitory:

Floors—hardwood

Roofing—asbestos shingle.

H. C. McNutt, Tupelo, Miss., wants prices on following for 3-story building:

Flooring—concrete

Roofing—tin.

R. R. Rapp, Archt., 417 Guaranty Bldg., Galveston, Tex., wants prices on following for \$75,000 community center building:

Flooring—hardwood, terrazzo, tile

Limestone

Marble

Metal Ceilings

Roofing—built-up

Tile—gypsum, hollow

Ventilators

Wire Glass.

James Stewart & Co., Inc., 507-09 Evans Bldg., Washington, D. C., want estimates, including alternates, until Nov. 29, on all material and construction for \$500,000 memorial to women of World War, Washington; Trowbridge & Livingston, Archts., 527 Fifth Ave., New York; plans from Washington and New York offices.

Bids Asked

Aluminum Pitchers.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 19 for 144 aluminum pitchers with tinned steel cool handles.

Automobile Tires, etc.—S. M. Ramsey, Sec., State Board of Control, Austin, Tex.—Receives bids Dec. 7 to supply State Highway Dept. with automobile and truck casings, tires and tubes for 6 months from date of contract.

Batteries.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 3 to furnish dry cell and flashlight batteries; delivery Philadelphia, Pa. Sch. No. 254.

Beacons.—Division of Supplies, Department of Commerce, Washington, D. C.—Receives bids Nov. 22 for establishing electric airway beacons and intermediate landing field equipment on the Greensboro-Richmond section of Atlanta-New York airway.

Beartrap Leaves.—U. S. Engineer, Pittsburgh, Pa.—Receives bids Dec. 7 for furnishing, delivering and erecting two sets of beartrap leaves for lock No. 6, Ohio River.

Beartrap Leaves.—U. S. Engineer, P. O. Box 72, Louisville, Ky.—Receives bids Nov. 23 for fabricating and erecting beartrap leaves for Dam No. 53, Ohio River.

Belting.—Purchasing Agent, Post Office Dept., Washington, D. C.—Receives bids Nov. 28 for 90 ft. rubber canvas conveyor belting, 30-in. wide.

Bobbinet.—Depot Quartermaster, Marine Corps, Philadelphia, Pa.—Receives bids Nov. 28 for 25,000 yds. 34-in., 150,000 yds. 28-in. and 25,000 yds. 50-in. bobbinet.

Boilers.—U. S. Veterans' Bureau, Const. Div., Arlington Bldg., Washington, D. C.—Receives bids Nov. 22 to furnish 4 horizontal tubular boilers for U. S. Hospital No. 79, Outwood, Ky.

Boring Machines.—U. S. Engr., Huntington, W. Va.—Receives bids Nov. 18 for 4 pneumatic wood-boring machines.

Bridge.—New Braunfels, Tex. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—Birmingham, Ala. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—Cattlettsburg, Ky. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—Oklahoma City, Okla., receives bids for 4 bridges. See Construction News—Bridges, Culverts, Viaducts.

Brushes.—U. S. Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 2 to furnish sash tool, scrubbing, stencil, varnish and whitewash brushes; delivery Philadelphia, Pa. Sch. No. 251.

Building Materials.—Quartermaster, Ft. Bliss, Tex.—Receives bids Nov. 28 for 87 boxes window glass, 1000 gals. paint, 10 rolls wire screening, 600 lbs. asbestos mastic, 200 gals roofing paint, 800 rolls roofing paper, etc.

Bulkhead Repairing.—U. S. Engineer Office, Norfolk, Va.—Receives bids Dec. 9 to furnish and place brush facings and rip-rap stone for repairing Craney Island bulkhead, Norfolk Harbor.

Cages.—C. G. Abbott, Acting Sec., Smithsonian Institute, Washington, D. C.—Receives bids Dec. 5 at office Director of National Zoological Park, to construct cages in new Public Exhibition Bldg. for birds.

Culverts.—Oklahoma City, Okla., receives bids for 4 culverts. See Construction News—Bridges, Culverts, Viaducts.

Clock.—U. S. Engineer, Galveston, Tex.—Receives bids Nov. 21 for 1 marine clock.

Celluloid.—Ch. of Engrs., Washington, D. C.—Receives bids Nov. 23 for 2500 sheets celluloid.

Coal.—Superintendent of Lighthouses, Staten Island, N. Y.—Receives bids Nov. 22 for 1800 tons bituminous coal.

Cylinders.—Department of Agriculture, Washington, D. C.—Receives bids Nov. 25 for 1500 special 25 cc. graduated cylinders.

Culverts.—State of Alabama receives bids for 4 culverts. See Construction News—Roads, Streets, Paving.

Duck.—Purchasing Agent, Post Office Dept., Washington, D. C.—Receives bids Nov. 21 for 500 yds. white cotton duck, No. 10, 66-in. wide.

Elevator (Passenger).—Geo. Crouchet, Sec., Police Jury of Lafayette Parish, Lafayette, La.—Receives bids Dec. 8 for one electric passenger elevator, special cab construction with complete installation; plans and specifications from Wm. T. Nolan, Canal Commercial Bank Bldg., New Orleans, La.

Envelopes.—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Nov. 18 for 100,000 manila window envelopes.

Gluing Machine.—Pur. Agt., Government Printing Office, Washington, D. C.—Receives bids Nov. 18 for gluing machine.

Gravel.—State of Louisiana. See Construction News—Roads, Streets, Paving.

Gravel.—Springville, La. See Construction News—Roads, Streets, Paving.

Griddle Cake Covers.—U. S. Veterans' Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 22 for 216 heavy gauge aluminum griddle cake covers.

Hardware, etc.—U. S. Engrs., Huntington, W. Va.—Receives bids Nov. 22 for 200 machine bolts, 800 lbs. washers, 60 steel wire fine brushes, 50 gal. liquid metal polish, 144 balls chalk line.

Lamp Cord.—U. S. Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 30 to furnish 15,000 lamp cords, delivery Philadelphia, Pa. Sch. No. 250.

Lockers.—Distr. Comms., Washington, D. C.—Receives bids Nov. 28 for lockers in new McKinley Technical High School.

Lubricating Guns.—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Nov. 21 for 60 high-pressure hand lubricating guns.

Miscellaneous Supplies.—General Purchasing Office, Panama Canal, Washington, D. C.—Receives bids Dec. 2 for the following, circular 1844:

Lathe, propeller, electric fan, insulated cable, water pipe, drills, bolts, rivets, paints, varnishes, carbon, cocoa fiber, linoleum, etc.

Miscellaneous Supplies.—Quartermaster Supply Officer, Ft. Sam Houston, Tex.—Receives bids Nov. 25 for claw hammer handles, and saws, mop handles, coal hods, corn brooms, manure fork handles, steel folding rules, etc.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Receives bids Nov. 26 for following; Sch. 1842:

Sanitary fixtures, water filters, terminal tubes, stuffing tubes, elevator safety switches, twist drills, reamers, end mills, bolts, screws, washers, shovels, steel tapes, clocks, enamel, varnish, fiber packing asbestos gaskets, etc.

Motors.—Quartermaster, Fort Howard, Md.—Receives bids Nov. 21 for synchronous motors.

Office Supplies and Stationery.—Quartermaster Supply Officer, Ft. Sam Houston, Tex.—Receives bids Nov. 28 for white mimeograph paper, white bond typewriter paper, wire waste baskets, rubber bands, index cards, writing ink, office paste, etc.; Circ. 143.

Oils, Gasoline, etc.—S. M. Ramsey, Sec., State Board of Control, Austin, Tex.—Receives bids Dec. 7 to supply State Highway Dept. with gasoline, oil and greases for one year from date of contract.

Paints.—Ch. of Engrs., Washington, D. C.—Receives bids Nov. 28 for paint, turpentine, white lead, pine tar, etc.

Paint, etc.—Ben M. Sawyer, Ch. Highway Commr., Columbia, S. C.—Receives bids Nov. 29 to furnish following for use by department in maintenance work for period Jan. 1 to Dec. 31, 1928:

(1) Paint—white guard rail; exterior cold water

(2) Joint Filler Material

(3) Woven Wire Fabric Highway Guard.

Paper.—Quartermaster, Fort Monroe, Va.—Receives bids Nov. 21 for 100 rms. bond paper and 500 rms. mimeograph paper.

Paving.—Brookhaven, Miss. See Construction News—Roads, Streets, Paving.

Paving.—Selma, Ala. See Construction News—Roads, Streets, Paving.

Paving.—Shreveport, La. See Construction News—Roads, Streets, Paving.

Pipe (Reinforced Concrete.)—See Sewers.

Pipe (Vitrified.)—See Sewers.

Pipe (Cast Iron.)—See Pipe Line.

Pipe Line.—City of Hagerstown, Md., Wm. P. Lane, Pres., Board of Water Commrs.—Receives bids Nov. 22 for Contract No. 5, Potomac River Project for laying pipe line from Potomac River filtration plant to city; including laying of 31,433 ft. of 24-in. cast iron pipe line, 269 ft. long, of 2 lines of 24-in. pipe and appurtenances.

Road.—Houston, Tex. See Construction News—Roads, Streets, Paving.

Road.—Springville, La. See Construction News—Roads, Streets, Paving.

Road.—Richmond, Tex. See Construction News—Roads, Streets, Paving.

Road.—Glasgow, Ky. See Construction News—Roads, Streets, Paving.

Road.—State of Maryland receives bids for 2 roads. See Construction News—Roads, Streets, Paving.

Road.—Jacksonville, Fla. See Construction News—Roads, Streets, Paving.

Road.—State of Louisiana receives bids for 4 roads. See Construction News—Roads, Streets, Paving.

Road.—State of Alabama. See Construction News—Roads, Streets, Paving.

School Equipment.—Board of Awards, Baltimore, Md.—Receives bids Nov. 23 at office of City Register for following: Joshua R. Jolly, Acting Sec. Board of School Commrs.:

- (1) Pianos—for Dept. of Education
- (2) Scissors—for Dept. of Education
- (3) Mechanical Laboratory Equipment—for Polytechnic Institute.

Screens.—Supervising Archt., Treasury Dept., Washington, D. C.—Receives bids Nov. 29 for insect screens at Amarillo, Tex.

Screwdrivers.—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Nov. 21 for 24 doz. screwdrivers.

Sewers.—City of Huntington, W. Va., Homer L. Yeich, Commr. of Streets.—Receives bids Nov. 28 for lateral sewer; A. B. Maupin, City Engr.

Sewers.—Kanawha County Commrs., Charleston, W. Va., R. N. Moulton, Clk.—Receives bids Dec. 5 for constructing 700 ft. of 12-in. sewer extending from Sattes-Nitro Rd. to Kanawha River.

Sewers.—Board of Awards, Baltimore, Md., Milton J. Ruark, Sewerage Engr., C. F. Goob, Ch. Engr.—Receives bids Nov. 23 for building sanitary sewers and storm drains in District J-7; work includes brick and concrete drain, reinforced concrete pipe drain, vitrified pipe drain.

Shafting, etc.—U. S. Engr., Galveston, Tex.—Receives bids Nov. 18 for cold rolled steel shafting, bronze shafting, valves, etc.

Sheaves.—U. S. Engr., Galveston, Tex.—Receives bids Nov. 18 for 18 steel swing sheaves and 1 pattern.

Sidewalks.—McCool, Miss. See Roads, Streets, Paving.

Speedometers.—Post Office Dept., Washington, D. C., Purchasing Agent.—Receives bids Nov. 21 for 10 speedometers.

Sperm Oil.—Depot Quartermaster, Marine Corps, Philadelphia, Pa.—Receives bids Nov. 29 for 600 gals. sperm oil.

Sperm Oil.—U. S. Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 29 to furnish 600 gal. sperm oil, delivery Philadelphia, Pa. Sch. No. 246.

Street.—Blue Mountain, Miss. See Construction News—Roads, Streets, Paving.

Street.—Camden, S. C. See Construction News—Roads, Streets, Paving.

Street.—Baltimore, Md. See Construction News—Roads, Streets, Paving.

Street.—Plaquemine, La. See Construction News—Roads, Streets, Paving.

Street.—Covington, La. See Construction News—Roads, Streets, Paving.

Street.—Brookhaven, Miss. See Construction News—Roads, Streets, Paving.

Street.—Enid, Okla. See Construction News—Roads, Streets, Paving.

Tables (Kitchen).—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 21 for 16 kitchen tables, 29-in. high, white porcelain top.

Terminal Strips.—Signal Corps Procurement Dist., Governors Island, N. Y.—Receives bids Nov. 21 for 500 porcelain terminal strips.

Transformers.—Signal Corps Procurement Dist., Governors Island, N. Y.—Receives bids Nov. 22 for 15 tone circuit transformers.

Tool Steel.—Purchasing Agent, Post Office Dept., Washington, D. C.—Receives bids Nov. 18 for 7 sheets annealed carbon tool steel sheets.

Tower.—Chemical Warfare Service, Edgewood Arsenal, Md.—Receives bids Nov. 21 for 1 glass lined steel chlorinating tower.

Trumpets.—U. S. Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Nov. 29 to furnish 400 trumpets, delivery Philadelphia, Pa. Sch. No. 249.

Washers.—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Nov. 21 for 1000 lbs. of washers.

Water Works.—City of Dunn, N. C., George L. Canady, Mayor.—Receives bids Nov. 21 for water works improvements, including 2 additional coagulating basin units, furnishing and erecting filter sand, laterals, manifold, piping and filter control equipment for 2 filter tubs in existing water works plant; furnishing 2 motor driven centrifugal pumps, erection of pumps and changes in filter piping; Wm. C. Olsen, Inc., Conslt. Engrs., Raleigh.

White Way.—City of Miami Beach, Fla., C. W. Tomlinson, Clk.—Receives bids Nov. 30 for Contract No. 4-WW, improvements contemplated are 9630 ft. of underground cable; 87 ornamental white way standards; 67 lighting units.

Windshield Cleaners.—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Nov. 21 for 1500 windshield cleaners.

Wire Cloth.—Quartermaster, Camp Meade, Md.—Receives bids Nov. 23 for wire cloth, window glass, putty locks and safety cable.

X-Ray Table.—U. S. Veterans' Bureau, Supply Div., Washington, D. C.—Receives bids Nov. 25 for combination X-ray table.

Erie City Iron Works Appointments.

J. R. Edwards has been appointed manager of sales for the Erie City Iron Works, Erie, Pa. He was formerly Western sales manager for the Pittsburgh Steel Products Company and has been associated with the steel industry for the past 14 years, former connections being with the Reading Iron Company of Reading, Pa., and the A. M. Byers Company at Pittsburgh. The Erie City Iron Works has also made appointments as follows: C. A. Reed, Pittsburgh district manager, with office at 1230 Park Building, Pittsburgh, Pa.; J. R. LeValley, special representative for the company, and who was formerly district manager of the Superheater Company at Pittsburgh and later director of engineering in the Motor Fuel Corporation; he is a captain in the Engineer Corps, United States Army Reserve. Joel Eklund, who has been made a sales engineer, was formerly engine designer with the Allis-Chalmers Company of Milwaukee, Wis.; also chief designing engineer for the United States Gypsum Company. C. O. Hoban, who has become a special representative for the company, has been for the last seven years erector traveling engineer for the Riley Stoker Corporation and during the last three years has been district manager of their Pittsburgh office.

Two Westinghouse Contracts.

The Gulf States Utilities Company, which is controlled by the Engineers Public Service Company, has placed with the Westinghouse Electric and Manufacturing Company of East Pittsburgh, Pa., an order for a 35,000-kilowatt turbine-generator unit, together with the necessary condensing equipment. This apparatus will be built at the South Philadelphia works, Philadelphia, Pa., and will be installed in the extension of the Neches Station, which is being built by Stone & Webster of Boston at Beaumont, Texas. It is to be ready for commercial service early in 1928. It is also important to note that the Westinghouse company recently sold to the Biggs-Long Realty Company, for installation in Keith's Theater, Huntington, W. Va., a two-scene pre-set-type theater switchboard, which is part of the complete Westinghouse equipment furnished for this theater. Rosenblatt & Hunt of Charleston, W. Va., are the contractors.

Foot-Burt Drills for Railroads.

Joseph T. Ryerson & Son Inc., of Chicago, with offices in 20 cities, have recently taken over the distribution of Foot-Burt drills to railroads. This splendid line of drilling equipment fits in well with the other tools and equipment which the company is now selling to the carriers. Foot-Burt equipment includes machines for single and multiple spindle drilling for a great variety of work such as mud rings, flue sheets, etc. A new catalogue of it will be sent upon request.

Charlotte Manager for Morse Chain.

The Morse Chain Company of Ithaca, N. Y., has appointed Harry E. Matthews as manager of their Charlotte (N. C.) office. This managership became vacant on the death of George W. Pritchett September 15, Mr. Pritchett having been manager of the Charlotte office since its opening. Mr. Matthews has been assistant manager there for the last eight years and is well equipped to take over his added responsibility.

Architects Open Office.

Martin L. Hampton and Robert Frank Jordan of Martin L. Hampton Associates, architects, of Miami, Fla., have opened an office for North Carolina at Statesville, N. C., and would like to receive catalogues and literature.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers, whether they are advertisers, or subscribers, or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

District Sales Representative Appointed.

L. J. Melson, who formerly represented the Reading Iron Company of Reading, Pa., in the South, has been appointed district sales representative for the company in the Cincinnati office, 618 Dixie Terminal Building. His good work in the South, both from a buyer and seller standpoint, earned him this promotion.

Douthitt Engineering Co. Installations.

Since the Kraft Cheese Company purchased from the Southern Dairies its plant at Selma, Ala., the chief engineer of the Douthitt Engineering Company of Chicago has visited Selma and is laying out the equipment which the Douthitt Company will install in the plant. It is also interesting to note that the equipment for the Borden Company plant at Fayetteville, Tenn., was furnished by the Douthitt Company, which is at present installing equipment to double the capacity of the plant. This plant began operation last May and has already reached and exceeded the full capacity of the original installation.

Fred. E. Norman.

Fred E. Norman, sales manager of the Oliver Iron and Steel Corporation, Pittsburgh, Pa., died November 3 at his home in Aspinwall, a suburb of that city. He was widely known to the trade and was a member of the Electric League of Pittsburgh, the Association of Railway Electrical Engineers, the Pittsburgh Chamber of Commerce, the American Institute of Electrical Engineers and the National Electric Light Association. He was 37 years of age. He is survived by his wife, Mrs. Elizabeth D. Norman, a daughter and a son.

Electric Light Plant and Franchise to Be Sold.

Announcement is made elsewhere in this issue that the City Council of Kinston, N. C., will receive bids for the municipal electric-light plant—together with franchise to conduct business in the city—at a meeting to be held there at 7.30 P. M. Monday, December 12. W. A. Mitchell is mayor and W. B. Coleman is city clerk. Further particulars will be found in the advertisement.

Transfer of Machine Tool Line to Another Plant.

The Harrington Company of Philadelphia, Pa., manufacturers of machine tools and chain hoists, have (owing to the diversity in manufacture and sale) decided to separate these two lines, and have made an arrangement with the Consolidated Machine Tool Corporation of America to take over the machine tool business, which department will be moved to the latter's plant at Rochester, N. Y., where they will continue the manufacture and sale of machines that the Harrington Company have heretofore made. It is further stated that by taking this department out of their business the Harrington Company will be able to devote their entire time and energies at the Philadelphia plant to the manufacture of chain blocks, electric hoists, trolleys, etc., and kindred material-handling equipment.

Universal Vacuum Dry Kiln Equipment Installed.

The Wunderlich Cooperage Company of St. Louis, Mo., slack cooperage manufacturer, is installing Universal Vacuum Dry Kiln equipment in their Memphis (Tenn.) stave plant. The Universal Vacuum Dry Kiln is manufactured by the Universal Vacuum Dryer Company of Kansas City, Mo.

Trade Literature

Bussler Dehydrating Process.

The Bussler Distribution Company, Inc., 730 Gravier street, New Orleans, La., which is affiliated with M. Bussler & Co., Inc., of the same city, and the Bussler Industries, Inc., of Westwego, La., has published a finely illustrated booklet, entitled "Solution of America's Food Problem: Bussler Process." A complete description of the Bussler process of dehy-

drating vegetables and fruits appeared in the MANUFACTURERS RECORD several years ago, since which time it has made great progress throughout the country, so that the Bussler companies now have (November, 1927) 217 machines out in different fields which are turning out dehydrated cabbage, carrots, celery, white potatoes, leek, okra, onions, parsnips, parsley, peppers, pimentos, rutabagas, tomatoes, turnips, spinach, stringless beans and sweet potatoes, besides fruits, which include apples, peaches, various berries, bananas, coconuts, pineapples, etc. There has been steady progress in the life of the company, which in November, 1921, had only three machines in operation. The capacity of each machine, it is stated, is approximately 150 to 300 pounds of fresh products in 24 hours and it can be installed in any room, as there is no odor or smoke from the dehydrator in operation. The booklet gives full particulars, accompanied by ample illustrations.

Cotton Seed Products Directory.

The International Cotton Seed Products Directory for 1927 and 1928 has just been published by the Cotton and Cotton Oil News of Dallas, Texas. It is a finely printed and handsomely bound book of 324 pages, containing a list of American cotton seed and other vegetable oil mills, refineries, linseed-oil mills, cotton-seed products brokers, linter buyers, oleo factories, fertilizer factories, linter and felt buyers, brokers and manufacturers, chemists, cotton compresses, lard-compound refiners, etc., besides a large list of wholesale grain and feed dealers in the United States. There are also 138 additional pages, covering the leading cotton mills of the entire country, together with their products, showing the amounts of cotton used and the names of the purchasing agents for the staple. The general contents are classified by States and under each State heading the classification is by the names of places where the industries are located. The price of the book is \$5.

Virginia Company Drills Huge Well.

A little booklet of 12 pages issued by the Virginia Machinery and Well Company, Inc., of Richmond bears the title "The Biggest Well in the United States," beneath which is a picture of this huge well, which was drilled by the company for the American Agricultural Chemical Company at Brewster (South Pierce), Fla., to be used in phosphate rock mining. It is stated that the output of this remarkable well is 8000 gallons of water per minute, or upwards of 11,000,000 gallons every 24 hours. It is 30 inches in diameter to the depth of 100 feet, and from there down to a depth of 850 feet it is 18 inches in diameter. The Virginia company furnished and installed the deep-well turbine, the centrifugal pump and the 250-horsepower motor, which pumps the well at the rate mentioned, which amounts to 480,000 gallons an hour. Other wells drilled by this company in Florida are at Lake Wales, Deland, Bartow, Maitland, Webster, St. Cloud and Boca Grande. Other wells are now being drilled by them for the Florida Public Service Company at Orlando and Avon Park, Fla. Several other wells also drilled in the South are shown in some of the pictures.

Practical Painting.

Enlarged in size and extended in scope, "Principles and Practices of Upkeep Painting" has just come from the press in a fifth edition. E. I. du Pont de Nemours & Co., Wilmington, Del., prepared and published the book, with Roy C. Sheeler as editor. It is stated that this book was written as a practical aid to plant superintendents or others responsible for the maintenance of industrial property and equipment and as a help to architects and engineers in the protection of new construction. It covers in simple, practical fashion modern painting practice for all types of exterior and interior surfaces. Copies may be obtained from the paint and varnish division of the Du Pont Company in the Public Ledger Building, Philadelphia, Pa.

\$1,500,000 Market Building for Baltimore.

A market and arcade building involving an expenditure of \$1,500,000 will be erected at the northeast corner of North and Maryland avenues, Baltimore, by the Maryland Improvement Corporation, comprised of a group of local business and professional men. Lee P. Hartman is president of the company. Financing of the project has been arranged and the Consolidated Engineering Company has been engaged as the contractor. Smith & May, Baltimore, are the architects.

The proposed building will cover a site about 245 by 303 feet. It will be a fireproof structure, of brick, steel and concrete, to contain 12 stores with basements, 12 arcade stores and 240 market stands, built of white enamel brick with marble tops and glass counter protection, 120 of which will be equipped with refrigeration.

Charles D. Kamp, president of the Market Construction Service Company of Cleveland, has been engaged to assist in operation of the market. Mr. Kamp was formerly city market master of Cleveland.

Group of Rayon Mills for North Carolina Planned by Chicago Capitalists.

Raleigh, N. C., November 12—[Special.]—Plans for the establishment of a group of rayon mills in Alamance county, near Burlington, N. C., which will ultimately involve an investment of millions of dollars were revealed following a recent conference of Albert M. Johnson, Chicago, president of the National Life Insurance Company, and June Harden, Burlington, with Gov. A. W. McLean, Wade H. Phillips,

director of the State Department of Conservation and Development; H. L. McClaren, Charlotte tire manufacturer and chairman of the State Department's Industrial Division, and Park Mathewson, department statistician.

Following the conference, Mr. Johnson, who headed the visiting party, announced that he was well pleased with the suitability of the location for a rayon plant and that an initial mill would be started in Alamance county. Labor conditions, water power and taxes constituted the principal topics of the conference, and the Chicago capitalist was quoted as being satisfied with conditions in all of these lines.

Establishment of the new concern will give Alamance county two rayon plants. Recently the May Hosiery Mills absorbed the plant of the National Dye Works and launched a rayon manufacturing program. Stock of that concern is now listed on the New York curb exchange.

Birmingham Pipe Company Gets Order for Los Angeles—Big Expansion Program Under Way.

Birmingham, Ala.—The McWane Cast Iron Pipe Company has booked an order for 250,000 feet of 6-inch pipe for Los Angeles, a total of about 3300 tons. The order will be divided between the Birmingham plant and the one at Provo, Utah, operated by the McWane interests.

By January 1 the new addition to the shops here in which will be manufactured cast iron pipe up to 12-inch diameter and by mechanical process will be in operation, several hundred thousand dollars being expended on the expansion program this year.

Making Mr. Duke's Dream Come True.

In his great vision of the future for the Piedmont region of the Carolinas, one is told that the late James B. Duke saw development on two parallel lines: A great industrial awakening, based on the region's resources of power, raw materials and abundant agricultural labor of high grade, and a tremendous social advancement which would utilize the industrial development and humanize it to the advantage of the people of the two States, and so to the benefit of the entire South and all the country. In short, Mr. Duke foresaw the coincidental and closely related creation of social values and of industrial values.

So it was that Mr. Duke provided for the union of his industrial enterprises with religious, educational and other social activities in the Carolinas. Each should work for the benefit of the other and all combined would work for the welfare and advancement of the people of the land he loved. The income from the industries is turned back to the religious, educational and social institutions and activities, thus creating both social and industrial values and humanizing the material productive industry.

In this work the industries have been sincere. They have striven to develop the Piedmont of the Carolinas, not only for their own gain, but in knowledge that any profit accruing through their efforts would be transferred to religious, educational and social beneficiaries. They are working in good faith and earnestly to make Mr. Duke's dream come true.

Thus, in the past six months, the Duke Power Company has striven to stimulate industry in that area by convincing advertising. Advertisements have been broadcast in the MANUFACTURERS RECORD and other nationally circulated publications and the story of the Piedmont has been spread in fertile fields. At hand is a pamphlet, "Pointing the Way to Piedmont Carolinas," containing reproductions of a dozen such advertisements. "Where Wealth Awaits You" is no visionary article, but a presentation of actual facts in concise, informative fashion. So, too, with "Where Wealth Grows at Triple Speed" and "You Have Grandfather's Chance." Each advertisement carries weight through truth, as well as in the attractions and inducements which it spreads before the world.

Mr. Duke laid a sound foundation for the development of the Carolina Piedmont and on it those entrusted with the constructive work are erecting a wonderful structure.

Wood Alcohol From Natural Gas.

Austin, Texas, November 14—[Special.]—Within a year chemists will have perfected a process of obtaining wood alcohol from natural gas, according to Dr. E. P. Schoch, professor of chemistry of the University of Texas, who has been working on the problem for some time.

When wood alcohol is obtained from natural gas it will be so cheap it will displace gasoline for fuel, Dr. Schoch predicted. He said that the fuel industry of the world will be revolutionized by the discovery. In support of this statement he pointed out that natural gas sells for an average price of seven cents a thousand cubic feet in the fields of Texas; that wood alcohol sells for 31 cents a gallon on the market. A thousand cubic feet of natural gas, now selling for seven cents, will yield not less than five nor more than ten gallons of wood alcohol, he asserted.

The chemical formula for transforming natural gas into wood alcohol is well known, Dr. Schoch said. The difficulty lies in applying this formula, but chemists are convinced it can be done and, in fact, announcement that it has been accomplished may be expected any time now.

So assured is the new discovery that Dr. Schoch urges that natural gas no longer be used for industrial and domestic

purposes. It should be conserved for the manufacture of cheap wood alcohol fuel, he declared. At present it is being wasted in the manner that it is used for fuel. It is believed the supply of natural gas in the United States is practically inexhaustible and that it would serve as a source for wood alcohol for an indefinite time.

Contract for Camp Meade Construction.

Camp Meade, Md.—General contract for the erection of three barrack buildings here has been awarded to the Palmer-Spivey Construction Company, Charlotte, N. C., by the Constructing Quartermaster at Camp Meade. The buildings will be of the Colonial type of architecture and will accommodate 600 enlisted men. Funds available for construction amount to \$410,000.

Officers of Virginia Municipalities League.

Lynchburg, Va.—At the convention here of the League of Virginia Municipalities, the following officers were elected: Charles D. Fox, Roanoke, president; C. B. Borland, Norfolk, first vice-president; I. G. Bass, Galax, second vice-president; J. D. Stickley, Harrisonburg, third vice-president; R. S. Braden, Hopewell, fourth vice-president; Norton L. Wallerstein, Richmond, executive secretary, and L. J. Houston, Fredericksburg, executive committeeman.

\$1,000,000 Club Building Contract Awarded.

The Wortham Construction Company of Louisville, Ky., has been awarded the general contract for the erection of a building for the Pendennis Club, 130 by 114 feet, three stories and basement. It will be of concrete and steel construction, of Georgian architecture, with cut stone and brick exterior, and is estimated to cost \$1,000,000. Nevin, Wischmeyer & Morgan of Louisville are the architects, and John P. Starks is chairman of the building committee.

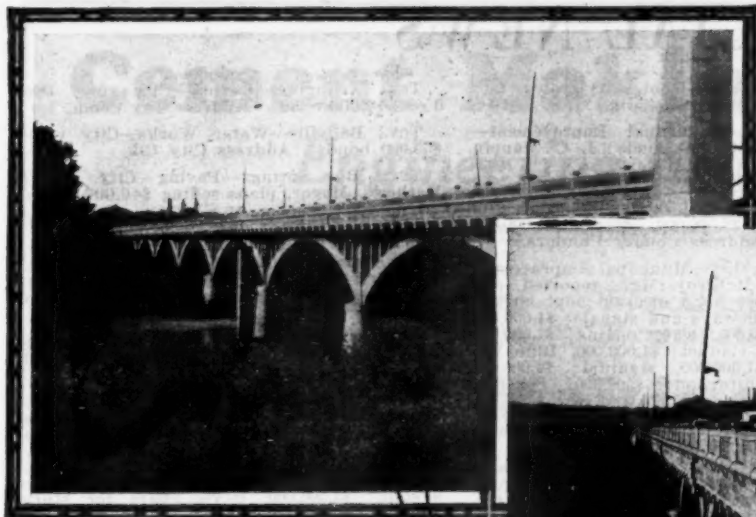
Growth of Indiantown.

Indiantown, Martin county, Florida, owned and being developed by the Land Company of Florida, is forging ahead. Located on the new Warfield State Highway at the intersection of the Seaboard Air Line Railway and the St. Lucie Canal, surrounded by some of the most fertile land in the world, and only 32 miles from the port of Palm Beach, this development has possibilities of becoming an active shipping point.

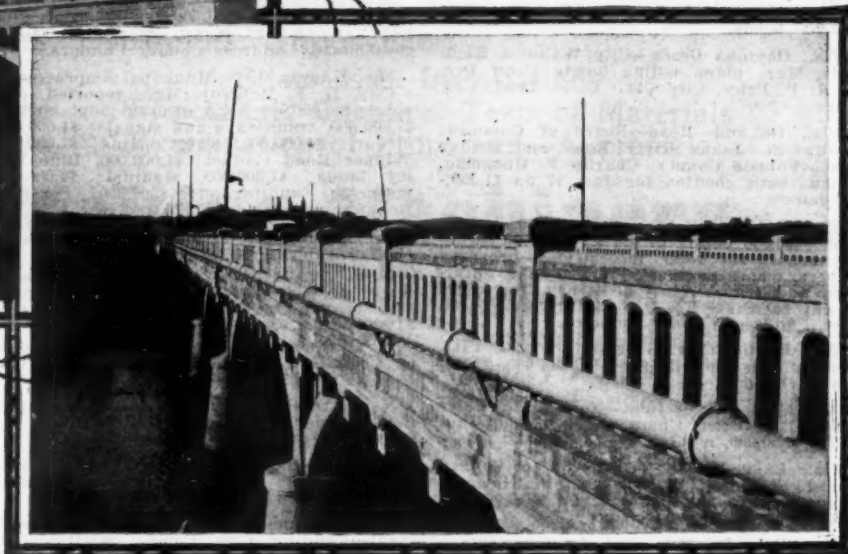
The Land Company of Florida is creating an agricultural and industrial center there that will supplement the railway headquarters recently established, as the Seaboard made Indiantown the headquarters of the East Florida Division, in addition to establishing their Extra Board from one of the northern points in Florida. Over \$1,500,000 has already been spent on this project.

Indiantown now has a railway administration building for the large staff stationed there, an electric light and power plant and a water filtration plant, each planned for future growth; also, a 12-grade school building and an up-to-date hotel, both in active use at the present time. The home building development is going ahead and already a number of attractive Spanish bungalows are finished.

Indiantown Farms, comprising 150,000 acres of fertile land only two miles from the townsite, is being laid out and developed in tracts of 10 acres and up. All lands are being cleared, drained, plowed and disced, ready for the occupancy of the farmer. The land is sold according to location and on terms, with the added feature that expert advice of the best agriculturists in the development department of the Seaboard Air Line Railway, is offered to those who wish it.



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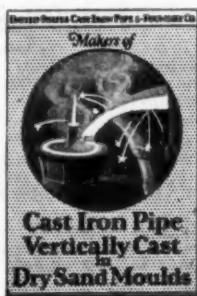


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FINANCIAL NEWS

Bond Issues Proposed

- Ala., Anniston—Improvement—City receives bids Nov. 24 for \$35,000, 5½%, \$500 denom. bonds. Address City Clk.
- Ark., Conway—Faulkner County, W. M. Harper, County Judge, considering selling \$12,000 bonds.
- Fla., Daytona Beach—City, Walter A. Richards, Mgr., plans selling bonds about Dec. 1; R. P. Price, City Clk.; C. N. Teaff, City Engr.
- Fla., DeLand—Road—Board of Commrs., Halifax-St. Johns River Road and Bridge Dist., Volusia County, Charles F. Burgman, Chmn., calls election for Jan. 17 on \$1,350,000 bonds.
- Fla., DeLand—Volusia County votes Dec. 6 on \$100,000 bonds to defray cost of securing grants for road, indemnifying property owners, where damage and removing buildings and fences were necessary, for right of way for State Road No. 4, through Fourth Dist. Address County Commrs.
- Fla., Eustis—City, George J. Dykes, Clk., receives bids Nov. 22 for \$15,000, 6%, \$1,000 denom. bonds.
- Fla., Fort Pierce—Inlet—Fort Pierce Inlet Dist., E. L. Price, Chmn., receives bids Jan. 10 for \$650,000, 6% bonds.
- Fla., Lake Butler—Road—Union County Board of Bond Trustees, J. S. Howard, Chmn., receives bids Nov. 22 for \$350,000 6% \$1000 denom. coupon bonds.
- Fla., Orlando—Municipal Improvements—City, J. A. Stinson, Clk., receives bids Nov. 30 for \$155,000 5% \$1000 denom. Series L bonds; \$85,000, paving; \$70,000, paving, sewer and sidewalk.
- Fla., Pensacola—Road—Escambia County Commrs. plan receiving bids for \$40,000 bonds.
- Fla., Pensacola—Municipal Improvement—City, J. E. Frenkel, Clk.-Treas., votes Dec. 13 on \$250,000 bonds, for paving, sewers, library and stadium improvements.
- Fla., Tampa—Road, Bridge—Hillsborough County Commrs., W. A. Dickinson, Clk., receives bids Nov. 25 for \$306,000 6% \$1000 denom. Lake Fern Special Road and Bridge Dist. bonds. 11-3
- Fla., Tampa—Road, Bridge—Hillsborough County Commrs., W. A. Dickinson, Clk., receive bids Dec. 9 for \$80,000 6% \$1000 denom. Palm River Special Road and Bridge Dist. bonds.
- Fla., West Palm Beach—School Funding—Palm Beach County Board of Public Instruction receives bids Dec. 1 for \$500,000, 6% bonds.
- Ga., Rockingham—School—Rockingham School Dist. votes Dec. 5 on bonds. Address Board of Trustees.
- Ky., Carlisle—Water Works—City voted \$25,000 bonds. Address City Clk.
- Ky., Hazard—Road—Perry County voted \$500,000 bonds. Address Commrs. 10-13
- Ky., Paducah—Municipal Improvement—City, J. N. Bailey, Mayor, defeated \$450,000 bond issue. 10-6
- La., Minden—School—Webster Parish School Board will call election Dec. 7 on \$70,000 Sarepta School Dist. bonds.
- La., New Orleans—School—Orleans Parish School Board rejected bids for \$2,000,000 \$1000 denom. not to exceed 5% bonds. 10-20
- La., Shreveport—School—Forbing School Dist. voted \$30,000 bonds; E. W. Jones, Supt. of School Board; receives bids Feb. 8 for \$30,000 5% bonds. 10-13
- Md., Annapolis—Board of Public Works receives bids Feb. 8 for \$1,815,000, 4¼% State construction bonds; Albert C. Ritchie, Governor.
- Md., Cumberland—Hospital—City, M. R. Hast, Clk., plans receiving bids about Jan. 1 for \$400,000 bonds.
- Miss., Bay Springs—Jasper County, Dist. No. 1, defeated \$60,000 bond issue. Address Board of Suprvs. 10-27
- Miss., Clarksville—School—Board of Suprvs. will call election on \$75,000 bonds.
- Miss., Grenada—City Hall—Town votes Dec. 3 on \$35,000 bonds. Address Town Clk.
- Miss., McComb—Fire House—City may issue \$20,000 bonds. Address City Clk.
- Miss., New Albany—Road—Union County Board of Suprvs. may call \$400,000 bond election.
- Miss., Picayune—School—City voted \$80,000 bonds. Address City Clk. 10-20
- Mo., Clarence—Municipal Improvement—City defeated \$130,000 bonds; J. C. Maupin, Mayor. 10-27
- Mo., Independence—Jackson County, reported, proposes \$11,500,000 bond election next spring: \$8,500,000, roads; \$5,000,000, courthouse. Address County Commrs.
- Mo., Kansas City—Municipal Improvement—City, H. F. McElroy, Mgr., reported, proposes \$25,000,000 bond election next spring: \$7,500,000, trafficways and signals; \$1,000,000, airport; \$4,000,000, water mains; \$1,000,000, Winner Road viaduct; \$1,000,000, Blue Valley lands; \$1,000,000, stadium; \$4,000,000, municipal auditorium; \$500,000, Pershing Road improvement; \$5,000,000, city hall.
- Mo., Springfield—School—Board of Education considering \$1,747,500 bond issue.
- N. C., Aurora—Electric Power Line—Town, Board of Aldermen, R. S. Thompson, Town Clk., receives bids Nov. 21 for \$20,000 6%, \$1000 denom. bonds.
- N. C., Burnsville—Funding—Yancey County Commrs., J. H. Ray, Clk., receive bids Nov. 25 for \$18,000 \$1000 denom. bonds.
- N. C., Danbury—Funding—Stokes County, J. J. Taylor, Clk., receives bids Dec. 5 for \$120,000, 4¼%, \$1,000 denom. bonds.
- N. C., Franklin—Municipal Improvement—City will vote on \$80,000 bonds, including \$12,000 for sewers. Address City Clk.
- N. C., Roanoke Rapids—Public Improvement—Funding—City Comm., receives bids Nov. 21 for \$15,000, \$500 denom. bonds.
- N. C., Roxboro—Courthouse, Jail—Person County Commrs., A. C. Gentry, Chmn., plan issuing and selling \$100,000 bonds.
- N. C., Salisbury—School Anticipation Notes—Rowan County Commrs., Max L. Barker, Clk., receive bids Nov. 21 for \$100,000 notes.
- Okla., Atva—Road—Woods County Commrs. plan \$850,000 bond election.
- Okla., Fairfax—Water Works—City votes Nov. 22 on \$12,000 bonds. Address City Clk.
- Okla., Frederick—Road—Tillman County votes Nov. 29 for \$900,000 bonds. Address County Commrs. 10-20
- Okla., Mangum—City voted \$122,000 bonds: \$75,000, water works; \$47,000, sewer. Address City Clk.
- Okla., Oklahoma City—Street—City, E. M. Fry, Mgr., votes Nov. 29 on \$285,000 bonds; B. M. Hart, Engr.
- Okla., Oklahoma City—School—Board of Education may issue \$1,700,000 bonds.
- Okla., Perry—School—Board of Education, O. W. Boyer, Pres., plans bond election.
- Okla., Tulsa—City Comm., Herman F. Newblock, Mayor, plans \$120,000 bond election, for fire stations, additional apparatus, equipment, etc.
- Okla., Tulsa—Underpass—City, Herman F. Newblock, Mayor, will receive bids for \$75,000 bonds.
- S. C., Greenville—Tuberculosis Hospital—Greenville County voted \$150,000 bonds; H. P. Dill, County Suprv. 8-11
- S. C., Orangeburg—Road—Orangeburg County may sell \$500,000 bonds. Address County Commrs.
- Tenn., Huntingdon—Road—Carroll County voted \$250,000 bonds. Address County Commrs.
- Tenn., Huntingdon—Road—Carroll County, D. A. Burkhalter, County Judge, plans issuing \$400,000 bonds in Dec. or Jan. 10-27
- Tenn., Johnson City—Improvement—City, T. H. McNeill, City Recorder, receives bids in about 2 weeks for \$33,100 bonds.
- Tenn., Lewisburg—School—Marshall County voted \$90,000 bonds. Address County Commrs.
- Tenn., Mountain City—Road—Johnson County voted \$420,000 bonds. Address County Commrs.
- Tenn., Ripley—Road—Lauderdale County, George W. Young, Judge, votes Dec. 20 on \$1,000,000 bonds.
- Tenn., Union City—Road—Obion County Commrs. receive bids Nov. 18 for \$645,000 4¼% bonds.
- Tenn., Wartburg—Road—Morgan County voted \$238,000 bonds. Address County Commrs.
- Tex., Amarillo—Airport—City Comm. may call election on \$18,000 bonds.
- Tex., Arlington—Paving—City votes Dec. 6 on \$40,000 bonds. Address City Comm.
- Tex., Bellville—Water Works—City voted \$55,000 bonds. Address City Clk.
- Tex., Big Springs—Paving—City, R. D. Mathews, Mayor, plans selling \$40,000 bonds.
- Tex., Brownwood—Sewer—City plans \$40,000 bond issue. Address City Clk.
- Tex., Corpus Christi—School—Corpus Christi Independent School Dist. plans voting on \$500,000 bonds. Address Board of Trustees.
- Tex., Corsicana—Road—Navarro County, Road Dist. No. 2, voted \$135,000 bonds. Address County Commrs. 10-13
- Tex., Dallas—City votes Dec. 15 on \$23,900,000 bond issue: \$1,900,000, public schools, etc.; \$5,500,000, street openings and widenings, building lines and underpasses; \$1,500,000, parks and connecting boulevards; \$1,000,000, extend and improve sanitary sewer system; \$3,500,000, city's share for storm water drainage; \$3,000,000, city's share for street paving; \$350,000, fire department, central station and other improvements; \$150,000, incinerators; \$500,000, libraries, additions and equipment; \$500,000, Institute of Fine Arts Bldg. and equipment; \$1,000,000, municipal auditorium, downtown building; \$400,000, municipal airport; \$400,000, hospitals; \$4,000,000, water works improvement; \$200,000 for working staff; E. A. Wood, City Engr. 11-3
- Tex., Edinburg—Road—Hidalgo County Road Dist. No. 1 voted \$4,000,000 bonds. Address County Commrs. 10-20
- Tex., El Paso—Road—El Paso County, E. B. McClintock, County Judge, plans voting in Dec. on bonds; Fred Wilson, County Engr.
- Tex., Galveston—Fire Boat—City votes Dec. 12 on \$200,000 bonds; J. E. Pearce, Mayor.
- Tex., George West—Highway—Live Oak County defeated \$800,000 bond issue. Address County Commrs. 9-29
- Tex., Greenville—City plans \$200,000 bond issue, including additional park and athletic field, municipal swimming pool and \$100,000 auditorium. Address City Clk.
- Tex., Houston—Street—City, George Woods, Mgr., may issue bonds; J. C. McVea, City Engr.
- Tex., Lampasas—City votes Dec. 6 on \$80,000 bonds: \$72,000, sewer; \$8000, water works improvement. Address City Sec.
- Tex., Madisonville—Road—Madison County voted \$800,000 bonds. Address County Commrs. 9-29
- Tex., Raymondville—Road—Willacy County, Lyford Road Dist., votes Nov. 19 on bonds. Address County Commrs.
- Tex., Sterling City—Road—Sterling County Commrs. may call bond election.
- Tex., Temple—Water Works—City, City Mgr., Byars, will purchase \$65,000 to \$70,000 city bonds of No. 1 water works issue.
- Tex., Troup—School—School Trustees plan \$12,000 bond election.
- Tex., Wichita Falls—Water Works—City, reported, votes Dec. 10 on \$1,800,000 bonds. Address City Clk.
- Virginia—State of Virginia, through Commrs. of Sinking Fund, plans selling in Nov. bonds of par value of \$2,468,005, not to exceed 4¼%, to retire state bonds held by various institutions and organizations; John M. Purcell, State Treas., Richmond.
- Va., Danville—Bridge—City, Charlton B. Strange, Auditor and Clk., receives bids Nov. 22 for \$250,000, 4¼%, \$1,000 denom. Main Street Bridge bonds.
- Va., Hopewell—City, Roy S. Braden, Mgr., voted \$50,000 bonds: \$25,000, jail; \$25,000, sewer. 9-29
- W. Va., Shepherdstown—School—City defeated \$75,000 bond issue. Address City Clk.

Bond Issues Sold

Ark., Little Rock—Confederate Pension—State Treas., sold \$3,000,000 4¼% State of Arkansas bonds to syndicate composed of Halsey, Stuart & Co., E. H. Rollins & Sons, Redmond & Co., Eastman, Dillon & Co., R. W. Pressprich & Co., B. J. Van Ingen & Co., Howe, Snow & Co., Inc., Stifel, Nicolaus & Co., Inc., all New York, and some Western houses, at 100.439.

(Continued on page 118)

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FINANCIAL NEWS

(Continued from page 116)

D. C., Washington—Sewer—Washington Suburban Sanitary Comm., Evans Bldg., 1420 New York Ave. N. W., T. Howard Duckett, Chmn., sold \$250,000 4½% Series Q bonds to Frank, Rosenberg & Co. and Jenkins, Whedbee & Poe, both Baltimore, at 105.199.

Fla., Fort Lauderdale—School—Broward County Board of Public Instruction sold \$250,000, 6%, \$1,000 denom. bonds to Poor & Co., Magnus & Co., and J. C. Mayer & Co., all Cincinnati, Ohio.

Fla., Tampa—Hillsborough County, W. A. Dickenson, Clk., sold \$75,000 6% Twenty-second Street causeway bonds to Assel, Goetz & Moerlein Co. at 100.14; \$75,000, 6% Tampa Road and Bridge Dist. bonds to J. C. Johnston Construction Co., 409 Cass St., at 95. 1-3

Fla., West Palm Beach—School Funding—Palm Beach County Board of Public Instruction sold \$500,000 bonds to Prudden & Co., Toledo, Ohio.

Ga., Savannah—City sold \$550,000 4½% refunding notes to Citizens and Southern Co., Savannah, at 102.66. 11-3

Ky., Fort Thomas—Sewer—City, Gertrude Leicht, Clk., sold \$100,000, 4¾%, \$1,000 denom. bonds to J. J. B. Hilliard & Son, Louisville, at premium of \$3.263. 10-20

Miss., Baldwin—School—Town, Forest Prather, Clk., sold \$40,000, 5% bonds to Bank of Commerce & Trust Co., Memphis, Tenn., at premium of \$480 and accrued interest; W. R. Anderson, Mayor. 10-13

Miss., Laurel—Road—Jones County Board of Supvrs. sold \$75,000 4½% Beat No. 2 bonds to Commercial Bank & Trust Co. at premium of \$750.

Miss., Piquette—School—City, B. W. Whitfield, sold \$80,000, 6%, \$1,000 denom. bonds to Bank of Piquette and Pearl River County Bank, both Piquette.

Mo., Marcelline—Water Filtration Plant—City, L. E. Shelton, Clk., sold \$48,000 4½% \$1,000 denom. bonds to Commerce Trust Co., Kansas City, at par. 11-10

Mo., St. Joseph—Lighting—City, Jas. S. Burris, City Comptroller, sold \$150,000, 4½% street and parkway lighting bonds to Prescott, Wright & Snyder, Kansas City, at 156.055; W. M. Spann, City Engr. 10-27

N. C., Durham—School—M. G. Markham, Register of Deeds, sold \$20,000 5% Glenn School Dist. bonds to Prudden & Co., Toledo, Ohio, at \$20.053. 11-3

N. C., Goldsboro—Improvement—City, G. G. Spence, Clk., sold \$75,000 4½% \$1,000 denom. bonds to A. E. Aub & Co., Cincinnati, Ohio, at \$75.401 and accrued interest. 10-3

N. C., Hendersonville—Druid Hills Sanitary

Dist. Commrs. sold \$75,000 6% bonds to Prudden & Co., Toledo, Ohio, at par. 11-10

N. C., Laurinburg—Street—City sold \$65,000 5¼% bonds to Prudden & Co., Toledo, Ohio, at premium of \$1910, equal to 102.93.

N. C., Lexington—Funding—Davidson County, C. C. Hargrave, County Mgr., sold \$150,000, 4½% bonds to A. T. Bell & Co., Toledo, Ohio, at premium of \$855. 10-20

N. C., Troy—Montgomery County Commrs., E. H. Eood, Clk., sold \$120,000, 4¾% bonds to R. S. Dickson & Co., at premium of \$2,360. 10-27

Okla., Chandler—Road—Lincoln County Commrs., sold \$1,200,000 bonds to Dept. of Exchange Trust Co., Tulsa.

Okla., Mulhall—Improvement—City sold \$22,000 5½% bonds to American-First Trust Co., Oklahoma City. 10-27

S. C., Camden—Street—City sold \$35,000, 5% bonds to South Carolina National Bank, Columbia, at premium of \$1,355.

Tenn., Jackson—Road—Madison County Commrs. sold \$335,000 4½% bonds to Second National Bank, Jackson, at premium of \$6425; K. K. Wilkes, County Judge.

Tenn., Knoxville—Revenue Anticipation—City, Charlton Karns, Mgr., sold \$1,500,000 3.88% bonds to Chemical National Bank, New York, at par.

Tenn., Nashville—Sewer—City, S. H. McKay, Clk., sold \$300,000, 4¼%, \$1,000 denom. bonds to Harris Trust & Savings Bank Chicago, at \$302.769. 11-3

Tex., Angleton—Road—Brozoria County Commrs. Court sold \$300,000, Road Dists. Nos. 25 and 26 bonds to M. W. Elkins & Co., Little Rock.

Tex., Austin—School—State Board of Education purchased about \$30,000, 5 and 5½% bonds.

Tex., Laredo—Municipal Improvement—City, A. R. Garcia, Sec., purchased \$18,000 of \$330,000 5% \$1,000 denom. bonds out of sinking fund. 9-22

Tex., Palestine—Sewer—City, A. M. Barton, Atty., sold \$125,000, 6% bonds to Garrett & Co., Dallas. 11-3

Building and Loan Associations

Md., Baltimore—Stanley Building and Loan Assn., 18 E. Lexington St., capital \$5,000,000, chartered; Louis S. Ashman, Pres.; Sewell Watts, of Baker, Watts & Co.; Julian S. Stein and C. Prevost Boyce, of Stein Bros. & Boyce, directors.

Tex., San Angelo—Texas Plains Building & Loan Assn., March Brothers Bldg., authorized capital stock \$10,000,000, and issued stock \$2,500,000, opened; J. A. Thomas, Chmn. of Board and Counsel; J. M. Reed,

Pres., 210 Western Ave., Amarillo; C. H. Amacker, Sec.-Mgr.

New Financial Corporations

Fla., Sanford—Sanford Atlantic National Bank, capital \$100,000, organized; Linton E. Allen, Correspondent.

Md., Baltimore—Prudential Co., 18 N. Charles St., incorporated; Waldemar and Frank I. de Bille, Ethel L. Hoerber.

Mo., Cape Girardeau—Cape Investment Co., capital \$50,000, incorporated; L. W. Simmons, Aubrey Davis, both Cape Girardeau; Bryan Wilson, Atty., 506 Olive St., St. Louis.

Mo., St. Louis—Waltke Securities Co. incorporated; Louis A. and Louis H. Waltke, 5521 Waterman St.

Mo., St. Louis—R. J. Brown Co. incorporated; Wm. R. Pfundt, Roy J. Brown.

Tenn., Chattanooga—Chattanooga Industrial Bank, 904 Georgia Ave., capital \$250,000, incorporated; W. H. Sears, Sec.-Treas., James Bldg.; E. H. Beaumont, V.-P.

Tex., El Paso—Canal Banking Co., capital \$25,000, opened; Herbert Blake Seay, Pres.; Thomas F. Rives, V.-P.; Porter L. Davis, Cashier.

Tex., Mansfield—Farmers & Merchants State Bank capital \$25,000, organized; W. W. Section, Pres., George W. Hackler, V.-P.; G. O. Bartle Cashier.

Va., Hopewell—State Planters Bank of Hopewell, capital and surplus \$250,000, organized; Julian H. Hill, Pres., 1810 Monument Ave.; W. Meade Anderson, V.-P., 3603 Moss Side Ave.; Thomas L. Preston, Sec.-Treas., State and City Bank Bldg., all Richmond.

First National Bank, F. A. Barrett, Pres., J. S. Hinton, V.-P. and Cashier, merged with Fort Lauderdale Bank & Trust Co., W. C. Kyle, Pres.; J. D. Camp, Cashier, both Fort Lauderdale, Fla.

Rainwater Bank, Wood Rainwater, Pres., Olive Rainwater, Sec., and People's Bank & Trust Co., J. S. Moore, Pres., Fred Spires, Cashier, both Morrilton, Ark., merged.

Guaranteed Bond & Trust Co., of Atlanta, Ga., established branch at Waycross, with C. E. Gibson, Mgr.

Marine Bank & Trust Co., D. W. Cooley, Pres.; Irwin H. Blune, Asst. Cashier and Sec. Board of Directors, Houston, plans increasing capital, \$300,000 to \$400,000.

Deposits in the mutual savings banks of Baltimore have steadily increased this year month by month from a total of over \$161,200,000 in January to more than \$169,800,000 in September.

Preparations for \$5,000,000 General Electric Plant in St. Louis.

St. Louis, Mo., November 10—[Special.]—An ordinance prepared by Roy C. Gans, chief engineer in the Department of Streets and Sewers here, intended to pave the way for the proposed \$5,000,000 manufacturing plant the General Electric Company of Schenectady, N. Y., plans to erect here, has been sent to the company by Sam W. Fordyce, attorney, its St. Louis representative. If the ordinance is satisfactory to the company, it will soon be placed before the Board of Aldermen.

Construction of the plant on the 155-acre site acquired by the General Electric Company, at Bircher street and Good-fellow avenue, is expected to begin as soon as engineers can prepare plans after passage of the ordinance. Approximately \$550,000 has been expended by the company for street and sewer improvements on the property.

Electric Industrial Trucks and Tractors.

October shipments of electric industrial trucks and tractors, as reported to the Department of Commerce by the nine leading manufacturers in the industry, were 100, as compared with 79 in September and 132 in October, 1926.

Weslaco in Lower Rio Grande Valley.

Nearly 25,000 carloads of vegetables and fruits were shipped from the Rio Grande Valley of Texas during the past season and the Weslaco Chamber of Commerce, in an attractively illustrated booklet, describes the part that city has taken in the Valley's development.

Founded in 1919, Weslaco in 1927 is a modern town of 6000 inhabitants and it is not an oil boom town or a boom town in any sense of the word; it is built on a solid agricultural development. The surrounding territory of fertile fields produces semi-tropical fruits and winter vegetables, as well as staple food and feed crops, which gives to this section a profitable agriculture. Cotton and forage crops in summer and vegetables in winter keep Weslaco's farms in constant production.

Weslaco's streets are paved, there is an adequate sewer system, ample water, organized fire protection and health department, good schools and electric and power facilities.

The Chamber of Commerce calls attention to the fact that health and general living conditions are ideal.

Transportation is furnished by the Missouri Pacific Railroad and a paved State highway, and Weslaco claims to be the largest shipping point for vegetables in the lower Rio Grande Valley.

How About Your Credit Information?

RELIABLE credit information often means the difference between safety in business dealings and uncertainty—perhaps losses.

We maintain a highly organized Credit Department, capable of obtaining dependable credit information on domestic or foreign concerns.

Let us supplement the information of your own Credit Department on your more important customers or prospects. We shall be glad to have you give us a trial.



Bank of New York & Trust Company

Capital, Surplus and Undivided Profits over \$18,000,000

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**Taylor,
Wilson
& Co. Inc.**
INVESTMENT SECURITIES

**WE BUY
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Public officials are invited to avail themselves of our facilities for preparation of legal details. Your inquiry receives prompt attention.
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NEW CAPITAL ISSUES

A good report by a New York engineer is a great help in interesting New York Banking Houses in the new capital needs of worthwhile companies. We also assist in establishing the right Banking House contacts. Consolidations, Reorganizations, Technical Service, Management.

EDWIN G. HATCH

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WE BUY MUNICIPAL BONDS

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MARYLAND TRUST COMPANY

BALTIMORE

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Correspondence and interviews invited

CAPITAL, \$1,000,000

7% and 8% Earnings

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Ask for

"PLAIN FACTS of B. & L."

These facts are covered by three interesting booklets which tell how one may invest \$5.00 monthly or \$10,000.00 lump sum and receive high security and return. They are yours for the asking.

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SAN ANTONIO BUILDING & LOAN ASS'N
Box 749—San Antonio, Texas

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Its policy is pleasing 16,000 customers who are its friends. Address us in regard to your financial requirements.

We invite your inspection of our modern, burglar-proof and fireproof Safety Deposit Vaults, which may be rented at small cost.

BALTIMORE COMMERCIAL BANK

GWYNN CROWTHER, President

26 South Street, Baltimore, Md.

Capital and Surplus \$1,350,000.00

Member Federal Reserve System

New Unit for Southern Webbing Mills.

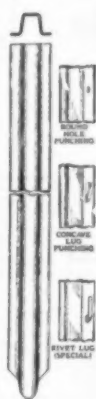
A new unit being erected for the Southern Webbing Mills, Inc., of Greensboro, N. C., will contain about 20,000 feet of floor space to house new looms for the production of elastic webbing. Contract has been awarded to J. R. Owens, Greensboro, for a two-story building, and to the Heater Well Drilling Company of Raleigh, N. C., for a water supply. J. M. Workman is the engineer.

Economic Survey of North Carolina County.

An economic and social survey of Alamance county, North Carolina, by John Harden of the economics department at the University of North Carolina, Chapel Hill, has recently been completed and will be published by the Burlington

Chamber of Commerce. H. B. Skinner, secretary of this organization, writes: "The rapid industrial and agricultural expansion in Alamance county has given rise to an increasing number of industrial plants and the selling of the local community to itself and to its own possibilities. As a result, out of 21 new industries located in the last year and a half, 90 per cent have been secured from internal expansion and capital."

Bids will be received until November 25 by the School Board, Richmond, Va., at the office of C. P. Walford, clerk and supervisor of the Richmond Public Schools, for the erection of an addition to the Armstrong Colored High School and for extending the present warm air heating plant; Charles M. Robinson, school architect.



SWEET'S HERCULEAN STEEL POSTS

"The Strongest Steel Posts Made"

Write for descriptive booklet

SWEET'S STEEL COMPANY
WILLIAMSPORT PENNA.

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Taylor Instrument Companies Rochester, N. Y. 2-16

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INSPIRATIONAL

Walter A. Richards, City Manager, City of Daytona Beach, Florida, writes in reference to the 1927 Blue Book of Southern Progress: "It is inspirational in that it clearly pictures the future development which must come, and at the same time it is not visionary, because every fact is supported by figures."

ARTESIAN WELLS

ANY SIZE ANY DEPTH
DRILLED ANYWHERE

VIRGINIA MACHINERY & WELL COMPANY, Inc.
Dept. M. R. RICHMOND, VA.

Mr. Manufacturer— ARE YOU GOING SOUTH?

What Do You Know About Greenville, North Carolina?

Its location relative to the best part of the "Sunny South." Greenville has a population of 12,000 with plenty of cheap labor available. Million dollar municipally owned power and water plant which has the cheapest general power rate in the State. 3000 H.P. capacity with a present daily load of 1000. Sinking fund sufficient to double capacity of plant. No long transmission line interruption, steady voltage and speed. Water department has three million gallon filter capacity, which water is ideal for industrial use, such as dyeing and washing, also for boiler use, there being no scale or tubes to bore or clean.

YOU SHOULD INVESTIGATE

For any information address Secretary

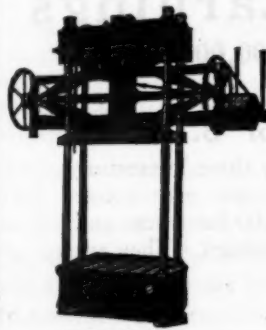
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Size—to suit your needs.
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PRESS COMPANY, Inc.**

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Pa. to Florida... deal *closed* in 3 mins.



THOUSANDS OF TIMES DAILY, the long distance telephone renders a similar service to American business. Is a man too busy to leave his office? Does he dread a long trip? Is there an emergency? Is time important? Is it desirable to save expense? Long distance calls are the answer. Nearly any negotiation, purchase or sale that can be made face to face can be made in person by telephone.

The every-day use of the telephone

A PHILADELPHIA real estate man was seeking to buy a suburban property, but the woman who owned it was visiting in Florida. Letter after letter failed to secure the necessary terms. Then, to make matters worse, he learned that a competitor was after the property. He called the owner by Long Distance, got her promptly, and in 3 minutes settled the terms and made the purchase. Charges, \$4.60. Amount involved, \$25,000.

for distant calls realizes many opportunities that otherwise would be lost. We suggest now that call across the state or continent that will clear up some pending transaction. We believe you will be surprised how little it will cost. Number, please?

BELL LONG DISTANCE SERVICE



Announcing A New Industrial Section

For Old and New Industries to Whom a Low Cost
Plant in a Most Healthful Location Close to Big
Population Centers is a Primal Consideration.

LAKEHURST

38 Miles from Philadelphia

65 Miles from New York

6 miles from the Jersey Coast - - 9 Miles beyond Lakewood

Directly on Central Railroad of New Jersey

In famous and Healthful PINE BELT of New Jersey

Adjoining UNITED STATES NAVAL AIR STATION

WE OWN 12,000 ACRES IN LAKEHURST with large frontages on the Central R.R. of N.J., and ample facilities for sidings. Except for the use of this land by the U. S. Government during the World War, the area we own, and are about to develop into a most comprehensive industrial and residential center, is virgin land. There are no eye-sore buildings to be removed; the land itself, in the main, is high, dry, well-drained and most advantageously located, immediately adjoining the U. S. Naval Air Station, where the "Los Angeles," the world's largest dirigible, is housed in the largest hangar in the world.

WE OFFER INDUSTRIAL SITES of such areas as may be required. We are offering these sites to responsible, industrial concerns, on most reasonable and favorable financial and occupancy terms. We are glad, always, to cooperate closely with Chambers of Commerce, Boards of Trade, and established, licensed real estate brokers everywhere. We pay full commissions to realtors, and invite immediate correspondence with industrial concerns or their representatives.

WE WILL FINANCE BUILDING ENTERPRISES contemplated by established industrial concerns seeking a new location, and new buildings. We will finance the construction of industrial plants, warehouses, etc., for financially responsible concerns recently organized.

THE DEVELOPMENT OF LAKEHURST WILL BE BEGUN IMMEDIATELY. Not only will Lakehurst be developed industrially, but residentially as well. Thousands of acres have been set aside for low cost, model homes. Other acreage, in the Resort or Lake and hotel section, bordering the town of Lakehurst and close to the

station, has been set aside for improvement with more expensive homes.

MILES OF 100-FOOT BOULEVARDS will be constructed. The major portion of this boulevard mileage, throughout the property, will be laid out in winding fashion, following the landscape plan of development adopted in the higher class model villages of English type, and to be seen elsewhere in Europe, in the suburbs of the Continental cities.

LAKEHURST, WHEN FINALLY DEVELOPED, should be a model for the development of all future industrial and residential colonies, in and near the metropolitan areas of New York City and Philadelphia.

THE GREATEST CONCENTRATION OF POPULATION in the United States, if not in the world, is in the area that has for its most important pivotal points the cities of New York, Newark, Trenton and Philadelphia. Lakehurst, geographically, is almost at the center of this area with its huge concentration of industrial activity, dynamic business and overflowing population. Good automobile roads, for pleasure cars and motor trucks, radiate in all directions from Lakehurst, and lead not only to the nearby outlying centers, but also the famous Jersey Coast, the Beaches and Atlantic Ocean—only six miles away, at Tom's River.

LAKEHURST HAS AN ENORMOUS ADVANTAGE in its location in the famous and most healthful pine belt of New Jersey, only nine miles beyond Lakewood, which winter and health resort in recent years has had a very large and ever-increasing annual floating population.

We invite correspondence, as Lakehurst has natural advantages possessed by but few locations in the United States.

LAKEHURST LAND & POWER CO., Inc.

122 Fifth Ave., New York City

Telephone Watkins 2448



PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



Bids close November 26, 1927.

\$265,000 6% Bonds

FLAGLER AND VOLUSIA COUNTIES,
FLORIDA
OCEAN SHORE IMPROVEMENT
DISTRICT BONDS

Daytona Beach, Fla.
NOTICE IS HEREBY GIVEN that the Board of Bond Trustees of Ocean Shore Improvement District in Flagler and Volusia Counties, Florida, will at a meeting of said Board to be held on the 26TH DAY OF NOVEMBER, A. D. 1927, at 2 o'clock P. M., at the office of the Secretary of said Board of Bond Trustees of said Ocean Shore Improvement District at Daytona Beach, Florida, receive sealed bids for the purchase of all those certain bonds of Ocean Shore Improvement District in Flagler and Volusia Counties, Florida, known as "Series AA" bonds, said bonds aggregating the principal sum of two hundred sixty-five thousand dollars (\$265,000), and to be due and payable as follows:

| Date of Maturity | Principal |
|-----------------------|-----------|
| December 1, 1938..... | \$5,000 |
| December 1, 1939..... | 5,000 |
| December 1, 1940..... | 5,000 |
| December 1, 1941..... | 5,000 |
| December 1, 1942..... | 7,000 |
| December 1, 1943..... | 8,000 |
| December 1, 1944..... | 9,000 |
| December 1, 1945..... | 9,000 |
| December 1, 1946..... | 10,000 |
| December 1, 1947..... | 12,000 |
| December 1, 1948..... | 15,000 |
| December 1, 1949..... | 18,000 |
| December 1, 1950..... | 21,000 |
| December 1, 1951..... | 24,000 |
| December 1, 1952..... | 25,000 |
| December 1, 1953..... | 27,000 |
| December 1, 1954..... | 30,000 |
| December 1, 1955..... | 30,000 |

Total\$265,000

and to bear interest at the rate of six per cent per annum, payable semi-annually on the first days of June and December of each year, the principal and interest of said bonds to be paid in gold at the banking house of the National Bank of Commerce in New York, New York City, New York, and each of said bonds being of the denomination of \$1000 and bearing date of December 1, 1927. The usual proceedings to validate said bonds have been instituted in the Circuit Court. The bonds are payable from unlimited taxation on all taxable property within the District.

The statutory authority for the issuance of these bonds is to be found in Chapter 12701, Laws of Florida, Acts of 1927, which Act provides for the issuance of said bonds for the purchase of paying a part of the cost of constructing certain roads described in said Act, and certain incidental expenses connected therewith.

Said Board of Bond Trustees of Ocean Shore Improvement District in Flagler and Volusia Counties, Florida, reserves the right to reject any or all of said bids.

Bids are requested on forms which will be supplied on application to W. H. Courtney, Secretary, Daytona Beach, Florida.

The successful bidder will be furnished, without expense to said bidder, with the opinion of Messrs. Caldwell & Raymond of New York City, approving the validity of all the proceedings leading up to and culminating in the issuance and sale of said bonds.

Each bid must be accompanied by a certified check drawn upon an incorporated bank or trust company, payable to the order of said Board of Bond Trustees, in the amount of two per cent of the par value of bonds bid for, which check shall be and become the property of said District as liquidated damages upon the failure of the bidder after said bonds have been duly validated to accept and pay for the bonds awarded to him within ten days after notice that such bonds are ready for delivery. Checks of unsuccessful bidders will be returned at once after the award of the bonds.

By order of the Board of Bond Trustees of Ocean Shore Improvement District in Flagler and Volusia Counties, Florida.

ED. JOHNSON,
Chairman.

W. H. COURTNEY,
Secretary.

Bids close November 28, 1927

TREASURY DEPARTMENT, Bureau of Engraving and Printing, Washington, D. C., November 7, 1927.—Sealed proposals are invited for the purchase of pulp during the last six months of the fiscal year beginning July 1, 1927. Proposals to be received not later than 2 P. M. Monday, November 28, 1927. Blank forms, with specifications for proposals and further information, will be furnished on application to A. W. HALL, Director.

Bids close December 1, 1927.

Office of Public Buildings and Public Parks of the National Capital, Navy Building, Washington, D. C. Sealed bids will be received at this office until 11 A. M. (Standard Time), December 1, 1927, and then publicly opened in Room 1613 Navy Building, for the erection in Washington, D. C., of a Building to Commemorate the Services and Sacrifices of the Women of the United States of America, its Insular Possessions and the District of Columbia in the World War. Further information upon application.

\$50,000 6% Paving Certificates

For Sale—50,000 dollars' worth paving certificates running nine years, 6 per cent interest, issued by City of Bastrop, La.
THIBODEAUX & HARRISON, INC.,
Baton Rouge, La.

Bids close January 10, 1928.

\$650,000 6% Bonds

FORT PIERCE INLET DISTRICT

Fort Pierce, Fla.
Sealed bids will be opened at 2 o'clock P. M. on January 10, 1928, for 650 \$1000 coupon bonds of Fort Pierce Inlet District, bearing six per cent semi-annual interest. Bonds mature serially from 1929 to 1958. Approving opinion by Thomson, Wood & Hoffman of New York City.

Write to E. L. Price, Chairman, Fort Pierce, Florida, for circular containing full information.

Bids close November 22 1927.

Highway Improvements

DEPARTMENT OF PUBLIC WORKS
STATE OF MARYLAND
STATE ROADS COMMISSION
NOTICE TO CONTRACTORS
Baltimore Md.

SEALED PROPOSALS for building two sections of State Highway as follows:
Washington County, Cont. W-26—One section of State Highway along the Cearfoss Pike between Hagerstown and Cearfoss for a distance of 1.5 miles. (Concrete Shoulders.)

Anne Arundel County, Cont. AA-48—One section of State Highway from end of Cont. AA-47 to Deale for a distance of 1.2 miles. (Gravel.)

will be received by the State Roads Commission at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 22nd day of November, 1927, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form, which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 10th day of November 1927.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids close December 15, 1927.

Highway

Baton Rouge, La.

Sealed Proposals will be received by the LOUISIANA HIGHWAY COMMISSION at their office in the Raymond Building, Baton Rouge, Louisiana, up to 11 o'clock A. M.

THURSDAY, DECEMBER 15, 1927, at which time and place they will be publicly opened, for paving the following Highway:

Federal Aid Project 154-A, Bossier Parish, Bossier City-Arkana Highway. Length, 12.935 miles.

Project 154-A begins at a point on the Shreveport-Minden Highway about one mile east of the Red River Bridge and extends through Brownlee and Vanceville to the north side of Fifth Street, in Benton. Width of pavement will be 20 feet and bids are invited for 2-inch Warrenite Bitulithic, 2-inch Bituminous Concrete (Modified Topeka Type) and 2½-inch Sheet Asphalt wearing surface on a 7-inch-5-inch-7-inch concrete base. 1:2.5:5 concrete, and for Reinforced Concrete Pavement 8-inch-6-inch-8-inch of 1:2:3-5 concrete.

Information as to the location, character of work, extent and class of material, terms of payment, regulations governing manner of submitting proposals and executing contract may, on application, be obtained at the office of the Louisiana Highway Commission, Raymond Building, Baton Rouge, Louisiana. Plans and specifications may be inspected at the office of the Commission in Baton Rouge, or will be furnished upon receipt of \$5.00 as payment therefor, not to be refunded. Each bid shall be submitted on a form furnished by the Commission and shall be placed, together with the proposal guaranty, in a sealed envelope so marked as to indicate its contents without being opened. This envelope shall then be placed in another, which shall be sealed and addressed to the LOUISIANA HIGHWAY COMMISSION, REYMOND BUILDING, BATON ROUGE, LOUISIANA.

FRANK T. PAYNE, Chairman,
LOUISIANA HIGHWAY COMMISSION.
NICHOLLS W. BOWDEN,
State Highway Engineer.

Bids close December 1, 1927.

Municipal Dock

Punta Gorda, Fla., November 1, 1927.

Sealed proposals will be received at the City Hall at Punta Gorda, Fla., up to two (2) o'clock P. M. on the first (1st) day of December, 1927, for the furnishing of all labor and material and for the construction of a Municipal Dock, Channel and Turning Basins. Bids shall be made on the basis of the successful bidder accepting Ten (10) Year, Seven (7%) Per Cent Time Warrants at Par Value in payment for the work done.

The principal quantities involved are approximately as follows:

26,000 cu. yds. Dredged Excavation (Spoiled).
47,000 cu. yds. Dredged Embankment Fill.
910 lin. ft. Steel Sheet Piling Bulkhead.
94 cu. yds. Reinforced Concrete.
20,000 ft. B. M. Bulkhead Timber in Place.
5,700 sq. yds. Pavement.

All bids will be compared on the basis of the Engineer's estimate of the quantity of work to be done.

A certified check on a bank satisfactory to the city officials in the sum of 5% of the amount bid, and made payable to the City of Punta Gorda, Fla., must accompany each proposal.

Plans and specifications are on file and may be examined at the office of the City Manager, and may be secured upon application and the payment of the sum of Ten Dollars (\$10).

The city reserves the right to reject any or all bids and award the contract in part to one or more bidders as considered to their best interests.

CITY OF PUNTA GORDA, FLORIDA.
D. F. SMOAK, Mayor-Commissioner.
C. K. DODD, City Manager.

Bids close November 29, 1927.

Street Improvements

Dawson, Ga.

Sealed proposals on blank forms furnished by the city and addressed to the "MAYOR AND COUNCIL, DAWSON, GEORGIA," will be received until 2 P. M. November 29, 1927, at Dawson, Georgia, for furnishing all material, equipment and labor for doing the following work:

Approximately 35,000 sq. yds. of street paving, together with all drainage, curb, curb and gutter and other incidentals connected therewith.

Each bid must be accompanied by a certified check (not bidder's bond), made payable to the City Clerk, for not less than five thousand (\$5000) dollars.

Plans and specifications may be seen at the office of the City Clerk or at the offices of the Engineers, and specifications may be obtained from the Engineers upon payment of \$2.00 to cover the cost of reproduction. Full sets of plans may be obtained from the Engineers upon payment of \$10 to cover cost of printing and handling.

The right is reserved to reject any or all bids.

R. R. MARLIN, Mayor.
R. R. JONES, City Clerk.

H. S. JAUDON ENGINEERING CO.,
Engineers,
Elberton, Georgia.

Bids close November 22, 1927.

Pipe Line

Hagerstown, Md., November 7, 1927.

SEALED BIDS, in duplicate, will be received by the Mayor and Council of the City of Hagerstown, Maryland, through the Board of Water Commissioners, at their office in City Hall until 10 o'clock A. M., Eastern Standard Time, Tuesday, November 22, 1927, for Contract No. 5, Potomac River Project, for laying pipe line from Potomac River Filtration Plant to the City of Hagerstown, involving laying 31,433 feet of 24-inch cast-iron pipe line and appurtenances and creek crossing, 269 feet in length, of two lines of 24-inch pipe and appurtenances.

Specifications and plans can be obtained at the office of the Board at the above address by prospective bidders. A cash deposit of \$25 will be required for sets of plans and specifications, which will be refunded upon return in good condition of the sets furnished.

A certified check in the sum of \$10,000 will be required with each bid.

Bids will be publicly opened and read at the time above given.

The Board reserves the right to reject any or all bids.

WILLIAM P. LANE,
President, Board of Water Commissioners.
ALBERT HEARD,
Secretary, Board of Water Commissioners.

Bids close December 14, 1927.

Courthouse and Jail
CHEROKEE COUNTY COURTHOUSE

Canton, Ga.

Sealed proposals will be received on or before 12 o'clock noon, Central time, December 14, 1927, at the Bank of Canton, Georgia, for the following work and under the following rules and conditions:

The building is to be located on the property of the county, located in Canton, Ga., at the northwest corner of North Main Street and North Church Street, and is to be a modern reinforced concrete frame building, with brick and marble enclosing walls, two stories and basement in part and four stories and basement in part. The building will cover an area on the ground of approximately 93 feet by 82 feet; otherwise as described in complete detail in plans, specifications and bid blank.

Bids will be received upon the following work, as more specifically shown and specified by the plans and specifications:

1—General Contractor's work (including mechanical work).

2—Jail work.

Plans and specifications for the above, together with bid blank, can be secured from A. Ten Eyck Brown, Architect, 717-20 Forsyth Building, Atlanta, Ga., upon deposit of a certified check for \$10, this check to be retained until the return of the plans and specifications in complete shape to the Architect. Plans and specifications, together with copy of contract, to be signed by successful bidder, showing the extent and character of the work to be done and the terms and time of payment, bond to be required, etc., are on file with said Architect and in the office of the Commissioner of Roads and Revenues of Cherokee County, Georgia, and are hereby referred to for a more detailed statement.

All bids to be considered must be received on or before 12 o'clock noon, Central time, December 14, 1927, and must be submitted on blanks to be furnished by the Architect covering formal items as called for by the specifications; each bid must be accompanied by a certified check for 2% of base bid, payable to E. A. McCanless, Chairman, as agreed liquidated damages in case the low bidder fails to sign contract and make proper bond.

The form of contract to be used will be that of the American Institute of Architects, Fourth Edition, 1925, as approved by the National Association of Builders.

All bids should be addressed to Mr. E. A. McCanless, Chairman Board of New Courthouse Commissioners, Canton, Ga., with the contents of each bid plainly marked on cover.

The right is reserved to reject any or all bids.

COUNTY OF CHEROKEE, GEORGIA.
By the New Courthouse Commissioners of Cherokee County; E. A. McCanless, Chairman thereof, and W. E. Reece, Clerk; R. Olin Fincher, Commissioner of Roads and Revenues of Cherokee County, Ga.

Bids close December 8, 1927.

Electric Passenger Elevator

Lafayette, La.

The Police Jury of the Parish of Lafayette, La., will receive sealed bids at 10 o'clock A. M. in its office on December 8, 1927, on one electric passenger elevator, special cab construction, with complete installation.

Plans and specifications may be had from William T. Nolan, Canal Commercial Bank Building, New Orleans, Louisiana.

GEO. CROUCHET,
Secretary Police Jury,
Lafayette Parish, La.

Bids close November 23, 1927.

School Equipment

DEPARTMENT OF EDUCATION
OFFICE OF THE
BOARD OF SCHOOL COMMISSIONERS
MADISON AND LAFAYETTE AVENUES
Baltimore, November 9, 1927.

Separate Sealed Proposals, in duplicate, addressed to the Board of Awards of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Md., until 11 o'clock A. M. Wednesday, November 23, 1927, endorsed as follows:

"Proposals for Planos for the Department of Education."

"Proposals for Scissors for the Department of Education."

"Proposals for Furnishing and Installing Additional Equipment in the Mechanical Laboratory of the Polytechnic Institute for the Department of Education."

Specifications for either of the above may be obtained at the office of the Director of Business Management of the Department of Education, Madison and Lafayette avenues, Baltimore, Md.

Each bid for planos must be accompanied by a certified check of the bidder for \$300.

Each bid for scissors must be accompanied by a certified check of the bidder for \$50.

Each bid for additional equipment in the mechanical laboratory of the Polytechnic Institute must be accompanied by a certified check of the bidder for \$100.

And made payable to the Mayor and City Council of Baltimore City and drawn on a clearing-house bank.

The successful bidder will be required to give bond for the faithful performance of his contract, and in an amount equal to the contract price, and to comply with the City Charter respecting contracts.

The Board of Awards reserves the right to reject any or all bids.

JOSHUA R. JOLLY,

Acting Secretary Board of
School Commissioners.

Approved November 9, 1927.

WILLIAM F. BROENING,
President Board of Awards.

**CLASSIFIED OPPORTUNITIES****MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES****LIMESTONE DEPOSITS**

FOR SALE—Limestone Deposits, unlimited supply, near Hawkinsville, Ga.
ROBT. S. ANDERSON,
Hawkinsville, Ga.

SLATE QUARRY

FOR SALE OR LEASE—Developed quarry for commercial slate, shale and aggregate. Excellent railroad facilities.
"OWNER,"

1521 Peachtree Street, Atlanta, Ga.

GYPSUM MINE

FOR SALE—Gypsum mine near Havana, Cuba. Finest quality, reasonable price; also small and large tracts of land near Havana suitable for subdivision purposes or trucking.
BEERS & COMPANY, Realtors,
Havana, Cuba.

RATES AND CONDITIONS

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost allow seven words of ordinary length to a line. When the advertisement contains a number of long words proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisement accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c per line; 300 lines, 26c per line; 500 lines or more, 25c per line.

MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES**GAS PROPERTIES WANTED**

INFORMATION DESIRED regarding gas properties which can be purchased and which have possibilities for interconnection with other properties. Address No. 6821, care of Manufacturers Record, Baltimore, Md.

TIMBER OPERATION

REAL BARGAIN CAN BE HAD IN THIS 40 to 50 Million feet Pine and Cypress Timber, New Band Mill, Tram and Locomotives and all other Equipment required to operate Sawmill. Plant is less than year old and can be sawing lumber in five days. For sale at Half Price to close partnership. OTHER TIMBER TRACTS AND LARGE TRACTS OF CUTOVER SOUTHERN LANDS.

F. L. GIBSON,
Thomasville, Georgia.

MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

TIMBER AND TIMBER LAND

SNAP—5000 acres, 7 million ft. timber, Pamlico Sound, \$45,000; fine game preserve. 8000 acres, 15 million ft. timber, \$125,000. Very attractive. W. T. Bailey, Suffolk, Va.

GREAT BARGAINS in Timber Lands. Many large tracts of timber lands for sale, from white oak to mahogany and all between. If you mean business write me. A. J. NOBLETT Green Cove Springs, Fla.

FLORIDA LAND WANTED

FLORIDA LAND WANTED.

Will purchase for colonization purposes one hundred thousand acres of good, cheap farm land. P. O. BOX 3, TRENTON, N. J.

FARM, FRUIT AND TRUCK LANDS

FLORIDA

"FLORIDA BOUND."

If you enjoy Life, you'll Love FLORIDA; "everybody" is going to FLORIDA this season—some for its Superb Climate, others to make safe and solid investments now, while it's still "bargain time," and return later to live; others to buy an inexpensive little home, Poultry Ranch, Truck Farm or Grove and "take life easy." We can "fit you up." Send today for booklet and list. **TAMPA-WEST COAST REALTY CO. (INC.)**, Realtors, Opp. P. O. "Since Before the War," Tampa, Florida.

FLORIDA LANDS OFFER WONDERFUL OPPORTUNITIES, AGRICULTURALLY AND HORTICULTURALLY

The phenomenal activity in Florida of 1924 and 1925, after running its course, was followed by an interval of depression. But the new, permanent forward movement, not a boom, has now started. This movement is based on Florida's evolution agriculturally and horticulturally. Unbounded wealth and fertility are in Florida's soil. The State needs men with energy and capital to develop her fertile lands for necessary production. The following large tracts, purchased now at price bottoms never to be reached again, will prove of special interest to the investor:

2340 acres perfectly drained rich truck and farming land on Polk and Hillsborough County lines, near two railroads, good towns and roads. Price \$30 per acre.

8000 acres drained land adjoining above tract, same quality rich soil, located near the city of Lakeland. Price ranging between \$35 and \$60 per acre.

5760 acres genuine Norfolk citrus land, high elevation, located in Hernando County near Brooksville. About 2000 acres cleared and ready to plant to trees, including 300 acres in four-year-old citrus trees; balance cutover citrus land, underlaid with clay and limestone. Railroad and station on tract, good roads, buildings, houses, deep well. Ideal for large grapefruit development. Price from \$50, \$100 to \$150 per acre.

23,000 acres first-class truck, farming and citrus land, located in Lake County. Railroad running through tract, near paved roads. Some fine timber, mineral clays, limestone, etc. Price \$17.50 per acre.

27,000 acres located in Hardee and Manatee Counties adjoining Polk and Hillsborough. First-class truck, farming and citrus land. Railroad, paved roads through property and near good towns. Will sell 7000 acres or 20,000, if desired. Price \$12.50 per acre.

For full description and best terms to financially able parties write or wire E. J. KAUFMANN, Box 15, Lakeland, Fla.

LOUISIANA

PECAN ORCHARD

610 acres, Louisiana alluvial farm, 3500 paper-shell pecan trees 14 to 18 years old, good residence and improvements; a safe, permanent investment. Price \$150,000.

W. A. STEPHENS, Realtor, P. O. Box 555, Shreveport, Louisiana.

FARM, FRUIT AND TRUCK LANDS

LOUISIANA

FOR SALE—At a sacrifice, \$3.75 per acre, 1952 acres of land; two forty-acre cuts of land in cultivation, a residence on one of the forties, a fairly good lot of pine and oak. This land joins the Bohemian Colony; it's well served with two highways; the Holloway and Deville road runs through this property. Bayou Flaggon furnishes plenty of water the year 'round. The oil lease will sell for as much as we are asking for the land in fee; it's situated eight miles from Alexandria, Louisiana; it's a wonderful piece of land for producing fruit and truck of all varieties, such as strawberries, potatoes, sweet potatoes, cantaloupes, watermelons, peanuts; in fact, anything. Come and see for yourself; see what the Bohemians have done. Kindly remember, this land in fee at \$3.75 per acre; all land adjoining this sells for \$25 per acre. If you don't believe this is a cheap proposition, wire any bank or banker in Alexandria, Louisiana, and ask them if this is an absolute bargain and see what they say. We only have a reasonable length of time to dispose of this property; first come, first served. E. M. SHUMAKE, Real Estate, Box No. 267, Alexandria, La.

NORTH CAROLINA

If interested

FOR HOME OR FOR INVESTMENT In the great and rapidly developing STATE OF NORTH CAROLINA, especially in its leading city, Charlotte, or in a Southern Cotton Mill or Southern Mill Stocks, write to

F. C. ABBOTT & CO.,
Realtors and Investment Bankers
Nearly thirty years in Charlotte.

TEXAS

"TEXAS 'WINTER GARDEN' LANDS."

A subdivision in 20-40 acre tracts, cleared and irrigated; suitable for Citrus Fruits, Winter Vegetables, Staple Crops. Reasonable prices. INVESTIGATE our proposition TODAY.

BERMUDA LANDS COMPANY, Realtors,
501-4 Houston Building,
San Antonio, Texas.

GAME PRESERVE

FOR SALE—Game preserve of 6000 acres, located five miles from the Atlantic Ocean on the coast of South Carolina. Property on the Inland Water route to Florida; 24 hours by rail from New York. Only few miles from Atlantic Coast Highway. Numerous game preserves owned by Northern Capitalist nearby. Ducks and Quail in abundance. Only large game preserve left this section. About 400 acres fine trucking land, cleared and ditched, ready for planting. Reached by tracks of Seaboard Air Line Railroad, Atlantic Coast Line nearby. Conceded to be one of the warmest truck farms in South Carolina. Property has been cultivated for several years without interference to the game. First time this property has been offered for sale as a game preserve. Write, wire or telephone

D. Q. TOWLES,
Meggetts, S. C.

BUSINESS OPPORTUNITIES

LOUISIANA

Going Building-Material Business in one of the fastest-growing cities of the South at a reasonable price. Reason for selling other interests; cannot give full time to this business. For particulars address No. 6823, care of Manufacturers Record, Baltimore, Md.

FINANCIAL ASSISTANCE WANTED.

Reliable party wanted who will assume all expenses incident to obtaining patent rights for steel office equipment and appliances and copyrights and accept stock in sales corporation to be organized in return for outlay. No activity necessary. No risk, as full protection will be granted. Address No. 6817, care of Manufacturers Record.

FACTORY SITES

FOR SALE—360 acres, situated 8 miles from business center of Atlanta; about 3000 feet railroad frontage; suitable for large industries and their village sites.

CRAIG COFIELD, Oakland, Florida.

FACTORY SITES

SAN ANTONIO, TEXAS—For Sale, excellent piece of trackage warehouse property, 225 ft. on M. K. & T. tracks, 200 feet deep, near depot. Consideration \$15,000. Diemann Construction Co., 306 E. Commerce street, San Antonio, Texas.

TAMPA, FLORIDA—the logical distributing point. **HARRIS TERMINALS**—fully equipped with railroad tracks on both the Seaboard and Atlantic Coast Line railroads. We solicit your inquiries for WAREHOUSE and FACTORY sites. Prices and terms reasonable. **HARRIS REALTY CO.**, Realtors, 105 W. Cass St., P. O. Box 585, Tampa, Florida.

IN BALTIMORE CITY—154,638 square feet of land, fronting on Belair Road, Vonderhorst and Sinclair avenues. Several immense well-built brick buildings. Former plant of Wilson Distillery Company. Close to main line of B. & O. For Sale cheap. If you can utilize this plant, it's a snap. Write, wire or phone W. K. Singleton, 5520 Connecticut avenue, Washington, D. C. Phone, Cleveland 2300.

INDUSTRIAL PLANTS

FOR SALE OR RENT—A good two-story brick building for overall or garment manufacturing plant, 50 ft. x 100 ft., on Main street, Troy, N. C. Town of 2000. Plenty of good, satisfied help; paved streets and sewerage; good climate. Piedmont section. Call at **BANK OF MONTGOMERY**, Troy, N. C.

PATENTS

FOR SALE—Cheap, for cash, several paying patents. Parties wishing address J. B. BRADLEY

71 N. W. 11th Terrace Miami, Florida.

WANT TO COMMUNICATE with manufacturer who is in position to manufacture and place on the market a patented side-dump vehicle body. Address J. K. EXUM, Lakeland, Georgia.

PATENT ATTORNEYS

PATENTS—Booklet free. Highest references. Best results. Promptness assured. **WATSON E. COLEMAN**, Patent Lawyer, 724 Ninth St. N. W., Washington, D. C.

PATENTS--TRADEMARKS--COPYRIGHTS Charlotte Office convenient to South. **PAUL B. EATON**, Registered Patent Attorney, 406 Independence Building, Charlotte, N. C., and 903 Grant Place N. W., Washington, D. C.

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INVENTORS—Send sketch or model of your invention for opinion concerning patentable nature and exact cost of applying for Patent. Book, "How to Obtain a Patent," sent free. Gives information on Patent procedure and tells what every inventor should know. Established 25 years. **Chandlee & Chandlee**, 412 Seventh St. N. W., Washington, D. C.

INDUSTRIAL SURVEYS

ENGINEERING REPORTS on resources of cities and towns. Recommendations for industrial development made by specialists in locating industries.

TECHNICAL SERVICE COMPANY, Woolworth Building New York City

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TRANSLATIONS

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4408 Bellevue Avenue,
Baltimore, Md.

Foreign translations in all lines desired. Specializing in Spanish, French, German, Italian.
Letters translated day of receipt.

COLLECTION

WE COLLECT Accounts, Notes, Claims anywhere in U. S. and Canada. No charges unless collected. Es. 25 years; bank ref. May's Collection Agency, Somerset, Ky.

BETTER COLLECTION METHODS

See how one credit manager collected an almost hopeless account, and received an additional cash order, with the following letter, from debtor:

"We have before us a letter from you that we think is an indication that you are a real Credit Manager. In fact, in all the years we have been doing business we have never received one that hits the nail on the head as this one of yours."

This letter reformed the customer into a good-paying account. Many other testimonials.

A series of six collection letters. \$2.50 cash for the six letters. Thoroughly tested. Send order to "Better Collection Methods, Box 605, High Point, N. C."

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Branch Office Service.
CINCINNATI Office Service.
Telephone Listing. Mail forwarding.
Personal Representation.
THOMPSON SERVICE.
627-S Union Trust Building, Cincinnati, Ohio

Telephone Listing. Mail forwarding.
Representation.
Unusual Facilities Offered for Use of Salesmen.
Assistance in Selecting Men to Travel in This Territory.
MANUFACTURERS AND REPRESENTATIVES' SERVICE BUREAU
Builders' Building Charlotte, N. C.

DISTRIBUTORS WANTED

DISTRIBUTORS for a highly recognized line of interior and exterior Structural Plastics. A real proposition for the dealer who controls or can develop volume business. Address No. 6824, care Manufacturers Record.

AGENCIES WANTED

AGENCIES—DEALERS.

Territories for sale of steel windows open in many parts of the United States. Write us for particulars. ALLISON STEEL PRODUCTS COMPANY, Chester, Pa.

MANAGING PROPRIETOR of manufacturers' agency, representing nationally advertised building specialties, desires change of location. Will purchase interest or all of well-established agency; references furnished. No. 6827, care Manufacturers Record.

AGENCIES WANTED

DISTRIBUTORS WANTED.

Good, live machinery distributors wanted to handle the complete line of OSGOOD gasoline, steam or electric powered shovels, cranes, draglines and back hoes. Excellent territories open throughout the South and Middle West.

THE OSGOOD COMPANY,
Marion, Ohio.

SITUATIONS WANTED

TIMEKEEPER, payroll clerk and general office man, with 15 years' experience in lumber office, desires position with reliable concern immediately; A-1 references. Address No. 6828, care of Manufacturers Record.

MEN WANTED

PLASTER SALESMEN or others calling on the Building Trade to handle a high-class line of Structural Plastics on a most liberal commission arrangement. Address No. 6825, care of Manufacturers Record.

WANTED—Purchasing Agent for Steel Company in Eastern Pennsylvania. Reply. No. 6829, care of Manufacturers Record, Baltimore, Md., stating age, experience and salary desired.

IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service, of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements; your identity covered and present position protected. Established seventeen years. Send only name and address for details.

R. W. BIXBY, INC.,
103 Downtown Bldg., Buffalo, New York.

SALESMAN

High-grade, with experience selling power-plant specialties. Acquaintance with executives or buyers in industrial field necessary. Every industrial and public institution, hotel, office building, every building and structure are prospects. The entire line are proven producers and backed by a Surety Bond, guaranteeing satisfaction. A permanent, profitable position, with 100% co-operation. Thorough training given. Exclusive territory. Write complete details. Replies confidential.

THE NORTH AMERICAN FIBRE
PRODUCTS CO.,

Cleveland, Ohio.

MEN WANTED

SALESMAN WANTED—Our proposition offers greater earning possibilities to the real salesman than is offered to him in most any other line. A credit and collection service with a bonded recovery obligation. American Security Credit Company, General Offices, St. Louis, Mo.

BUSINESS GETTER—Promotion work, personal contact prospective clients and prospects wanted by established building-construction organization; knowledge of building work, also familiarity with Mississippi Valley territory desirable. Men who have and can produce results. Give full information first letter to No. 6830, care of Manufacturers Record, Baltimore, Md.

CONTRACT WORK WANTED

DEPENDABLE COMPANY, with 45 years' experience, operating well-equipped and extensive plant consisting of Pattern Shop, Foundry, Machine Shop, Forge and Structural Shop, supported by skilled mechanics and capable engineers, wants connection with reliable consulting and contracting Engineers and others who desire a plant to manufacture Machinery and Equipment to meet their requirements. Plant facilities suitable for the manufacture of light or heavy units. Grey Iron and Semi-steel castings up to 40,000 lbs.; Brass and Aluminum up to 1000 lbs. Address No. 6796, care of Manufacturers Record, Baltimore, Md.

TIMBERS AND PLANK

FOR SALE—Oak or Cypress structural and railroad timbers and plank cut to order, Poplar and Gum Squares or dimensions. Inquiries solicited.

UNITED TIMBER & LUMBER CO.,
Memphis, Tenn.

MACHINERY AND SUPPLIES

FOR SALE—OIL ENGINE

25 H.P. Fairbanks-Morse type Y Oil Engine, slightly used, in perfect condition; Florida shipping point. Address No. 6826, care of Manufacturers Record, Baltimore.

GEISER PEERLESS SAWMILLS

Have stood the test since 1858. New number 00 just completed. To operate by Fordson or other tractor. Strong—Accurate—Capacity—Durability—Low Price.

GEISER MANUFACTURING COMPANY,
Waynesboro, Pa.

ICE-MAKING AND REFRIGERATING MACHINERY—New and rebuilt. Our prices on new Waynesboro Refrigerating equipment and Household Electric Refrigerators very low. Buy direct from the manufacturer. All sizes. Get our prices on your requirements. GEISER MANUFACTURING COMPANY, "Department E," Waynesboro, Pa.

Notice of Proposal to Sell Valuable Municipal Electric Light Plant.

The City Council of the City of Kinston, North Carolina, will receive offers for its valuable municipal electric light plant, together with franchise to do business in the City of Kinston, at a meeting to be held in the City of Kinston at City Hall at 7.30 P. M. on Monday, December 12, 1927.

Prospective purchasers are invited to submit seal bids for plant, franchises, rates for power and lighting to consumers, including street lighting for the City of Kinston.

The City of Kinston will require from each bidder a certified check, drawn to order of City of Kinston, upon some Bank or Trust Company in the amount of \$100,000 as evidence of good faith.

The City Council of the City of Kinston reserves the right to reject any and all bids made.

For further particulars, address the undersigned.

W. A. MITCHELL, Mayor.
W. B. COLEMAN, City Clerk.

THE STORY THE SOUTH IS WRITING

"The greatest epic ever written upon the pages of human history in material affairs is that which the South is writing in its marvelous achievements at the present time." From the 1927 BLUE BOOK OF SOUTHERN PROGRESS.

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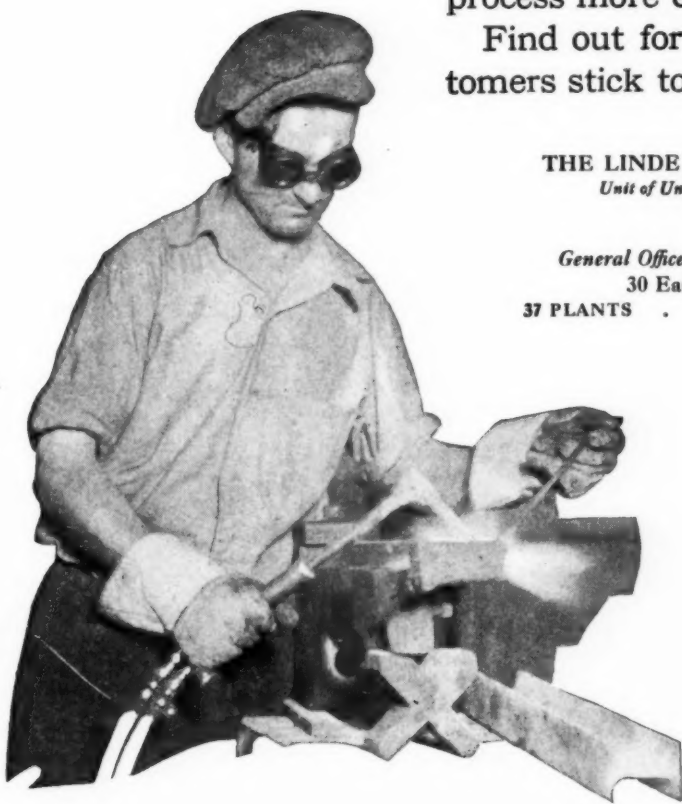
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Linde wants YOU as a customer

WHETHER you are a large or small user of oxygen, whether your plant is in Maine or California, Linde wants you for a customer.

Linde process service can help you as a small user with the practical application of the oxy-acetylene process. It can help you as a large user to work out new processes of manufacture and to determine just how you can use the oxy-acetylene process more economically.

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ALL INDUSTRY Profits by Hercules Power

Hercules matchless ability to do a power job better and cheaper enables every Hercules user to set new standards of profit. This ability results directly from Hercules strength and simplicity.

Forty-three per cent *additional* output was secured with Hercules Power in a sawmill.

Work was kept eight months ahead of contract time with Hercules Power in grading equipment.

Hercules loaded five shovelfuls

instead of four in excavating. Thus Hercules Power sets new records of endurance throughout American industry.

The simplicity of Hercules design, the consistent precision of Hercules production, and the Hercules factor of strength throughout underlie the successful operation of more than 75,000 Hercules Engines and Power Units. Hercules personal engineering service and the complete Hercules line of fours and sixes assures your getting the right engine in the right place.

HERCULES MOTORS CORPORATION
Canton, Ohio

Hercules

E N G I N E S

